



NIJ

Special

REPORT

Test Results for Digital Data Acquisition Tool:
EnCase 5.05f

www.ojp.usdoj.gov/nij

**U.S. Department of Justice
Office of Justice Programs**

810 Seventh Street N.W.
Washington, DC 20531

Michael B. Mukasey
Attorney General

Jeffrey L. Sedgwick
Acting Assistant Attorney General

David W. Hagy
Director, National Institute of Justice

This and other publications and products of the National Institute of Justice can be found at:

National Institute of Justice
www.ojp.usdoj.gov/nij

Office of Justice Programs
Innovation • Partnerships • Safer Neighborhoods
www.ojp.usdoj.gov

AUG. 08

**Test Results for Digital Data Acquisition Tool:
EnCase 5.05f**



David W. Hagy

Director, National Institute of Justice

This report was prepared for the National Institute of Justice, U.S. Department of Justice, by the Office of Law Enforcement Standards of the National Institute of Standards and Technology under Interagency Agreement 2003-IJ-R-029.

The National Institute of Justice is a component of the Office of Justice Programs, which also includes the Bureau of Justice Assistance, the Bureau of Justice Statistics, the Office of Juvenile Justice and Delinquency Prevention, and the Office for Victims of Crime.

June 2008

**Test Results for Digital Data Acquisition Tool:
EnCase 5.05f**

Contents

1	Results Summary	2
2	Test Case Selection	2
3	Results by Test Assertion.....	4
3.1	Logical Acquisition of NTFS Data Duplication	6
3.2	Logical Acquisition of NTFS Last Sector Omitted	6
3.3	Acquisition of Faulty Sectors.....	6
3.4	Alternate Restore Procedure	6
4	Testing Environment.....	7
4.1	Test Computers	7
4.2	Support Software	7
5	Test Results.....	7
5.1	Test Results Report Key	8
5.2	Test Details	8
5.2.1	DA-06-ATA28.....	8
5.2.2	DA-06-ATA48.....	11
5.2.3	DA-06-FLOPPY	13
5.2.4	DA-06-FW	14
5.2.5	DA-06-NCAB-ENBD.....	16
5.2.6	DA-06-NCAB-LINEN.....	18
5.2.7	DA-06-PART	20
5.2.8	DA-06-SCSI.....	21
5.2.9	DA-06-USB	23
5.2.10	DA-07-CF	25
5.2.11	DA-07-F12.....	27
5.2.12	DA-07-F16.....	29
5.2.13	DA-07-F32.....	31
5.2.14	DA-07-F32X.....	33
5.2.15	DA-07-NTFS	35
5.2.16	DA-07-THUMB.....	37
5.2.17	DA-08-ATA28.....	39
5.2.18	DA-08-ATA48.....	41
5.2.19	DA-08-DCO.....	43
5.2.20	DA-09-01	45
5.2.21	DA-09-02	48
5.2.22	DA-09-16.....	51
5.2.23	DA-09-64.....	54
5.2.24	DA-10-BEST	57
5.2.25	DA-10-PASSWORD	59
5.2.26	DA-10-UNCOMPRESSED	61
5.2.27	DA-12	63
5.2.28	DA-13	64
5.2.29	DA-14-ATA28.....	66
5.2.30	DA-14-ATA48.....	68

5.2.31	DA-14-BEST	70
5.2.32	DA-14-CF	72
5.2.33	DA-14-F12	74
5.2.34	DA-14-F16	76
5.2.35	DA-14-F32	78
5.2.36	DA-14-F32-ALT	80
5.2.37	DA-14-F32X	82
5.2.38	DA-14-F32X-ALT	84
5.2.39	DA-14-FLOPPY	86
5.2.40	DA-14-FW	87
5.2.41	DA-14-HOT	89
5.2.42	DA-14-NTFS	91
5.2.43	DA-14-NTFS-ALT	93
5.2.44	DA-14-PASSWORD	95
5.2.45	DA-14-SCSI	97
5.2.46	DA-14-THUMB	99
5.2.47	DA-14-UNCOMPRESSED	101
5.2.48	DA-14-USB	103
5.2.49	DA-17	105
5.2.50	DA-22-ATA28	107
5.2.51	DA-22-F16	109
5.2.52	DA-24	111
5.2.53	DA-25	113

Introduction

The Computer Forensics Tool Testing (CFTT) program is a joint project of the National Institute of Justice (NIJ), the research and development organization of the U.S. Department of Justice (DOJ), and the National Institute of Standards and Technology's (NIST's) Office of Law Enforcement Standards, and Information Technology Laboratory . CFTT is supported by other organizations, including the Federal Bureau of Investigation (FBI), the U.S. Department of Defense Cyber Crime Center, U.S. Internal Revenue Service Criminal Investigation Division Electronic Crimes Program, and the U.S. Department of Homeland Security's Bureau of Immigration and Customs Enforcement, U.S. Customs and Border Protection, and U.S. Secret Service. The objective of the CFTT program is to provide measurable assurance to practitioners, researchers, and other applicable users that the tools used in computer forensics investigations provide accurate results. Accomplishing this requires the development of specifications and test methods for computer forensics tools and subsequent testing of specific tools against those specifications.

Test results provide the information necessary for developers to improve tools, users to make informed choices, and the legal community and others to understand the tools' capabilities. This approach to testing computer forensic tools is based on well-recognized methodologies for conformance and quality testing. The specifications and test methods are posted on the CFTT Web site (<http://www.cftt.nist.gov/>) for review and comment by the computer forensics community.

This document reports the results from testing EnCase, version 5.05f, against the *Digital Data Acquisition Tool Assertions and Test Plan Version 1.0*, available at the CFTT Web site (<http://www.cftt.nist.gov/DA-ATP-pc-01.pdf>).

Test results from other software packages and the CFTT tool methodology can be found on NIJ's computer forensics tool testing Web page, <http://www.ojp.usdoj.gov/nij/topics/ecrime/cftt.htm>.

Test Results for Digital Data Acquisition Tool

Tool Tested: EnCase
Version: 5.05f
Run Environments: Windows XP, Windows Server 2003 & Windows 2000

Supplier: Guidance Software, Inc.

Address: 215 North Marengo Ave.
Pasadena, CA 91101

Tel: 626-229-9191

Fax: 626-229-9199

WWW: <http://www.guidancesoftware.com/>

1 Results Summary

Except for three test cases (DA-07, DA-09, and DA-14), the tested tool acquired all visible and hidden sectors completely and accurately from the test media without any anomalies. The following five anomalies were observed:

1. If a logical acquisition is made of an NTFS partition, a small number of sectors, seven in the executed test, appear in the image file twice, replacing seven other sectors that fail to be acquired (DA-07-NTFS).
2. If a logical acquisition is made of an NTFS partition, the last physical sector of the partition is not acquired (DA-07-NTFS).
3. If the tool attempts to acquire a defective sector with an error granularity greater than one sector, some readable sectors near the defective sector are replaced by zeros in the created image file (DA-09-02, DA-09-16, and DA-16-64).
4. If the tool attempts to acquire a defective sector from an ATA drive while using FastBloc SE to write block the drive, no notification of faulty sectors is given to the user.
5. For some partition types (FAT32 and NTFS) that have been imaged as a logical (partition) acquisition, if a logical restore is performed there may be a small number of differences in file system metadata between the image file and the restored partition (DA-14-F32, DA-14-F32X and DA-14-NTFS). The differences can be avoided by removing power from the destination drive instead of doing a normal power down sequence (DA-14-F32-ALT, DA-14-F32X-ALT and DA-14-NTFS-ALT).

2 Test Case Selection

Not all test cases or test assertions defined in *Digital Data Acquisition Tool Assertions and Test Plan Version 1.0* are appropriate for all tools. In addition to the base test cases, each remaining test case is linked to optional tool features needed for the test case. If a given tool implements a given feature then the test cases linked to that feature are

run. Table 1 lists the features available in EnCase and the linked test cases selected for execution. Table 2 lists the features not available in EnCase and the test cases not executed.

Table 1 Selected Test Cases

Supported Optional Feature	Cases selected for execution
Base Cases	06, 07 & 08
Destination Device Switching	13
Read error during acquisition	09
Create an image file in more than one format	10
Insufficient space for image file	12
Create a clone from an image file	14 & 17
Fill excess sectors on a clone device	22
Detect a corrupted (or changed) image file	24 & 25

Table 2 Omitted Test Cases

Unsupported Optional Feature	Cases omitted (not executed)
Create a clone during acquisition	01, 02 & 04
Create cylinder aligned clones	03, 15, 21 & 23
Convert an image file from one format to another	26
Device I/O error generator available	05, 11 & 18
Fill excess sectors acquired to a clone device	19 & 20
Create a clone from a subset of an image file	16

Some test cases have variant forms to accommodate parameters within test assertions. These variations cover the execution environment, acquisition interface to the source drive, and type of digital object acquired. Variations were also created for image file format.

The tool was executed in one of the following Microsoft run time environments: Windows XP, Windows Server 2003 or Windows 2000.

The following source interfaces were tested: ATA28, ATA48, network cable, USB, and FireWire.

The following digital sources were tested: partitions (FAT12, FAT16, FAT32, FAT32X, and NTFS), compact flash, and thumb drive.

The image files were created on either NTFS or FAT32 partitions.

3 Results by Test Assertion

Table 3 summarizes the test results by assertion. The column labeled **Assertions Tested** gives the text of each assertion. The column labeled **Tests** gives the number of test cases that use the given assertion. The column labeled **Anomaly** gives the section number in this report where any anomalies found for the assertion are discussed.

Table 3 Assertions Tested

Assertions Tested	Tests	Anomaly
AM-01 The tool uses access interface SRC-AI to access the digital source.	28	
AM-02 The tool acquires digital source DS.	28	
AM-03 The tool executes in execution environment XE.	53	
AM-05 If image file creation is specified, the tool creates an image file on file system type FS.	28	
AM-06 All visible sectors are acquired from the digital source.	27	3.2
AM-07 All hidden sectors are acquired from the digital source.	3	
AM-08 All sectors acquired from the digital source are acquired accurately.	27	3.1, 3.3
AM-09 If unresolved errors occur while reading from the selected digital source, the tool notifies the user of the error type and location within the digital source.	4	3.3
AM-10 If unresolved errors occur while reading from the selected digital source, the tool uses a benign fill in the destination object in place of the inaccessible data.	4	3.3
AO-01 If the tool creates an image file, the data represented by the image file is the same as the data acquired by the tool.	27	
AO-02 If an image file format is specified, the tool creates an image file in the specified format.	3	
AO-04 If the tool is creating an image file and there is insufficient space on the image destination device to contain the image file, the tool shall notify the user.	2	
AO-05 If the tool creates a multi-file image of a requested size then all the individual files shall be no larger than the requested size.	27	
AO-06 If the tool performs an image file integrity check on an image file that has not been changed since the file was created, the tool shall notify the user that the image file has not been changed.	1	
AO-07 If the tool performs an image file integrity check on an image file that has been changed since the file was created, the tool shall notify the user that the image file has been changed.	1	
AO-08 If the tool performs an image file integrity check on an image file that has been changed since the file was created, the tool shall notify the user of the affected locations.	1	
AO-10 If there is insufficient space to contain all files of a multi-file image and if destination device switching is supported, the image is continued on another device.	1	

Assertions Tested	Tests	Anomaly
AO-12 If requested, a clone is created from an image file.	23	
AO-13 A clone is created using access interface DST-AI to write to the clone device.	23	
AO-14 If an unaligned clone is created, each sector written to the clone is accurately written to the same disk address on the clone that the sector occupied on the digital source.	22	3.4
AO-17 If requested, any excess sectors on a clone destination device are not modified.	11	
AO-18 If requested, a benign fill is written to excess sectors of a clone.	2	
AO-19 If there is insufficient space to create a complete clone, a truncated clone is created using all available sectors of the clone device.	1	
AO-20 If a truncated clone is created, the tool notifies the user.	1	
AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.	53	

Two test assertions only apply in special circumstances. The assertion AO-22 is checked only for tools that create block hashes. This assertion does not apply to EnCase. The assertion AO-24 is only checked if the tool is executed in a run time environment that does not modify attached storage devices, such as MS DOS. A write blocker was used during the tests, so assertion AO-24 was not checked. Table 4 lists the assertions that were not tested, usually due to the tool not supporting some optional feature, e.g., creation of cylinder aligned clones.

Table 4 Assertions not Tested

Assertions not Tested
AM-04 If clone creation is specified, the tool creates a clone of the digital source.
AO-03 If there is an error while writing the image file, the tool notifies the user.
AO-09 If the tool converts a source image file from one format to a target image file in another format, the acquired data represented in the target image file is the same as the acquired data in the source image file.
AO-11 If requested, a clone is created during an acquisition of a digital source.
AO-15 If an aligned clone is created, each sector within a contiguous span of sectors from the source is accurately written to the same disk address on the clone device relative to the start of the span as the sector occupied on the original digital source. A span of sectors is defined to be either a mountable partition or a contiguous sequence of sectors not part of a mountable partition. Extended partitions, which may contain both mountable partitions and unallocated sectors, are not mountable partitions.
AO-16 If a subset of an image or acquisition is specified, all the subset is cloned.
AO-21 If there is a write error during clone creation, the tool notifies the user.
AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source.
AO-24 If the tool executes in a forensically safe execution environment, the digital

Assertions not Tested
source is unchanged by the acquisition process.

3.1 Logical Acquisition of NTFS Data Duplication

Seven sectors (27,744,184--27,744,190) were not imaged correctly into the image file (DA-07-NTFS). The seven sectors were replaced in the image file by the content of seven other sectors (27,744,120—27,744,126). The actual content of sectors 27,744,184--27,744,190 was not acquired. This result was verified by constructing a dd style image file that hashed to the same value as reported by the EnCase acquisition.

3.2 Logical Acquisition of NTFS Last Sector Omitted

The last physical sector of the NTFS partition was not acquired (DA-07-NTFS). The partition has 27,744,192 sectors. EnCase acquired the first 27,744,191 sectors.

3.3 Acquisition of Faulty Sectors

EnCase 5 allows specification of an error granularity that specifies the size of a window surrounding any encountered faulty sectors such that for any faulty sectors encountered the sectors within the window surrounding the faulty sector are replaced by zeros in the created image file. Variations of test case DA-09 were executed with error granularity of 1, 2, 16 and 64. Variations DA-09-01, DA-09-02, and DA-09-16 were executed using a hardware write blocker and variation DA-09-64 was executed with FastBloc SE (a software write blocker).

Variation DA-09-01 acquired all readable sectors and filled the faulty sectors place in the image file with zeros (expected behavior). Variations DA-09-02 and DA-09-16 acquired, with the exception of readable sectors within granularity blocks surrounding faulty sectors, all readable sectors outside of granularity blocks surrounding faulty sectors. This is the behavior intended for the tool by the software vendor.

For variation DA-09-64 there were two anomalies: (1) the user was not notified that faulty sectors were encountered on the source, and (2) each faulty sector was surrounded by a variable sized block (varying from 1 to 64 sectors) of sectors filled with non-zero data from an undetermined source (rather than the expected 64 sector zero filled blocks).

3.4 Alternate Restore Procedure

For certain partition types (FAT32 and NTFS), a logical restore of a partition is not an exact duplicate of the original (DA-14-F32, DA-14-F32X and DA-14-NTFS). The vendor documentation states that a logical restore cannot be verified as an exact copy of the source and is not recommended when seeking to create a bit-stream duplicate of the source. For FAT32 partitions, two file system control values (not part of any data file) are adjusted as a side effect of restoring an image to a destination. This adjustment is confined to about 8 bytes of sector 1, the first sector of the FAT table, and the first sector

of the FAT table backup copy of the partition. For NTFS partitions, changes were made to about 40 sectors of the partition. In no case was there any effect on sectors used in data files. All sectors of the image file accurately reflected the original sectors. These changes to a restored partition (logical volume) may be a consequence of the Windows shutdown process.

One procedure to avoid this behavior during the normal Windows shutdown process is to crash the system by removing power without allowing Windows to shutdown. Because powering off the entire system suddenly could compromise the integrity of other files on the system, NIST modified this procedure to power off only the destination drive and then follow the normal Windows shutdown procedure. The result of the modified procedure was to eliminate the anomaly from the restored copy while maintaining the integrity of the remainder of the file system. The modified procedure was used for tests DA-14-F32-ALT, DA-14-F32X-ALT and DA-14-NTFS-ALT.

4 Testing Environment

The tests were run in the NIST CFTT lab. This section describes the test computers available for testing.

4.1 Test Computers

Four test computers were used.

Frank, Freddy, Joe, and Max have the following configuration:

Intel Desktop Motherboard D865GB/D865PERC (with ATA-6 IDE on board controller)
BIOS Version BF86510A.86A.0053.P13
Adaptec SCSI BIOS V3.10.0
Intel® Pentium™ 4 CPU 3.4Ghz
2577972KB RAM
SONY DVD RW DRU-530A, ATAPI CD/DVD-ROM drive
1.44 MB floppy drive
Two slots for removable IDE hard disk drives
Two slots for removable SATA hard disk drives
Two slots for removable SCSI hard disk drives

4.2 Support Software

A package of programs to support test analysis, FS-TST Release 2.0, was used. The software can be obtained from: <http://www.cftt.nist.gov/diskimaging/fs-tst20.zip>.

5 Test Results

The main item of interest for interpreting the test results is determining the conformance of the tool under test with the test assertions. Conformance with each assertion tested by a

given test case is evaluated by examining the **Log Highlights** box of the test report summary.

5.1 Test Results Report Key

A summary of the actual test results is presented in this report. The following table presents a description of each section of the test report summary.

Heading	Description
First Line:	Test case ID, name, and version of tool tested.
Case Summary:	Test case summary from <i>Digital Data Acquisition Tool Assertions and Test Plan Version 1.0</i> .
Assertions:	The test assertions applicable to the test case, selected from <i>Digital Data Acquisition Tool Assertions and Test Plan Version 1.0</i> .
Tester Name:	Name or initials of person executing test procedure.
Test Host:	Host computer executing the test.
Test Date:	Time and date that test was started.
Drives:	Source drive (the drive acquired), destination drive (if a clone is created) and media drive (to contain a created image).
Source Setup:	Layout of partitions on the source drive and the expected hash of the drive.
Log Highlights:	Information extracted from various log files to illustrate conformance or nonconformance to the test assertions.
Results:	Expected and actual results for each assertion tested.
Analysis:	Whether or not the expected results were achieved.

5.2 Test Details

5.2.1 DA-06-ATA28

Test Case DA-06-ATA28 EnCase 5.05f	
Case Summary:	DA-06 Acquire a physical device using access interface AI to an image file.
Assertions:	<p>AM-01 The tool uses access interface SRC-AI to access the digital source.</p> <p>AM-02 The tool acquires digital source DS.</p> <p>AM-03 The tool executes in execution environment XE.</p> <p>AM-05 If image file creation is specified, the tool creates an image file on file system type FS.</p> <p>AM-06 All visible sectors are acquired from the digital source.</p> <p>AM-08 All sectors acquired from the digital source are acquired accurately.</p> <p>AO-01 If the tool creates an image file, the data represented by the image file is the same as the data acquired by the tool.</p> <p>AO-05 If the tool creates a multi-file image of a requested size then all the individual files shall be no larger than the requested size.</p> <p>AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p> <p>AO-24 If the tool executes in a forensically safe execution environment, the digital source is unchanged by the acquisition process.</p>

Test Case DA-06-ATA28 EnCase 5.05f																									
Tester Name:	slm																								
Test Host:	joe																								
Test Date:	Wed Apr 18 16:18:23 2007																								
Drives:	src(43) dst (none) other (fat32)																								
Source Setup:	<pre> src hash (SHA1): < 888E2E7F7AD237DC7A732281DD93F325065E5871 > src hash (MD5): < BC39C3F7EE7A50E77B9BA1E65A5AEFF7 > 78125000 total sectors (40000000000 bytes) Model (0BB-75JHC0) serial # (WD-WMAMC46588) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057143205 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 X 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 X 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 X 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 X 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 X 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 004208967 1023/001/01 1023/254/63 82 Linux swap 14 X 029431080 027712125 1023/000/01 1023/254/63 05 extended 15 S 000000063 027712062 1023/001/01 1023/254/63 07 NTFS 16 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 020980827 sectors 10742183424 bytes 3 000032067 sectors 16418304 bytes 5 002104452 sectors 1077479424 bytes 7 004192902 sectors 2146765824 bytes 9 008401932 sectors 4301789184 bytes 11 010490382 sectors 5371075584 bytes 13 004208967 sectors 2154991104 bytes 15 027712062 sectors 14188575744 bytes </pre>																								
Log Highlights:	<pre> Start: 04/17/07 10:46:06AM Acquisition Hash: BC39C3F7EE7A50E77B9BA1E65A5AEFF7 Actual Date:04/17/07 10:46:06AM File Integrity:Completely Verified, 0 Errors Acquisition Hash:bc39c3f7ee7a50e77b9bale65a5aeef7 Verify Hash:bc39c3f7ee7a50e77b9bale65a5aeef7 EnCase Version:5.05f System Version:Windows 2000 Error Granularity:64 Read Errors:0 Missing Sector Errors:0 CRC Errors:0 Total Size:40,000,000,000 bytes (37.3GB) Total Sectors:78,125,000 Settings: fill none size cd Write Block: 4 FastBloc IDE </pre>																								
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-01 Source acquired using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AM-02 Source is type DS.</td> <td>as expected</td> </tr> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AM-05 An image is created on file system type FS.</td> <td>as expected</td> </tr> <tr> <td>AM-06 All visible sectors acquired.</td> <td>as expected</td> </tr> <tr> <td>AM-08 All sectors accurately acquired.</td> <td>as expected</td> </tr> <tr> <td>AO-01 Image file is complete and accurate.</td> <td>as expected</td> </tr> <tr> <td>AO-05 Multifile image created.</td> <td>as expected</td> </tr> <tr> <td>AO-22 Tool calculates hashes by block.</td> <td>option not available</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> <tr> <td>AO-24 Source is unchanged by acquisition.</td> <td>not checked</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-01 Source acquired using interface AI.	as expected	AM-02 Source is type DS.	as expected	AM-03 Execution environment is XE.	as expected	AM-05 An image is created on file system type FS.	as expected	AM-06 All visible sectors acquired.	as expected	AM-08 All sectors accurately acquired.	as expected	AO-01 Image file is complete and accurate.	as expected	AO-05 Multifile image created.	as expected	AO-22 Tool calculates hashes by block.	option not available	AO-23 Logged information is correct.	as expected	AO-24 Source is unchanged by acquisition.	not checked
Assertion & Expected Result	Actual Result																								
AM-01 Source acquired using interface AI.	as expected																								
AM-02 Source is type DS.	as expected																								
AM-03 Execution environment is XE.	as expected																								
AM-05 An image is created on file system type FS.	as expected																								
AM-06 All visible sectors acquired.	as expected																								
AM-08 All sectors accurately acquired.	as expected																								
AO-01 Image file is complete and accurate.	as expected																								
AO-05 Multifile image created.	as expected																								
AO-22 Tool calculates hashes by block.	option not available																								
AO-23 Logged information is correct.	as expected																								
AO-24 Source is unchanged by acquisition.	not checked																								

Test Case DA-06-ATA28 EnCase 5.05f	
Analysis:	Expected results achieved

5.2.2 DA-06-ATA48

Test Case DA-06-ATA48 EnCase 5.05f																							
Case Summary:	DA-06 Acquire a physical device using access interface AI to an image file.																						
Assertions:	<p>AM-01 The tool uses access interface SRC-AI to access the digital source.</p> <p>AM-02 The tool acquires digital source DS.</p> <p>AM-03 The tool executes in execution environment XE.</p> <p>AM-05 If image file creation is specified, the tool creates an image file on file system type FS.</p> <p>AM-06 All visible sectors are acquired from the digital source.</p> <p>AM-08 All sectors acquired from the digital source are acquired accurately.</p> <p>AO-01 If the tool creates an image file, the data represented by the image file is the same as the data acquired by the tool.</p> <p>AO-05 If the tool creates a multi-file image of a requested size then all the individual files shall be no larger than the requested size.</p> <p>AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p> <p>AO-24 If the tool executes in a forensically safe execution environment, the digital source is unchanged by the acquisition process.</p>																						
Tester Name:	slm																						
Test Host:	joe																						
Test Date:	Wed Apr 18 16:40:06 2007																						
Drives:	src(4C) dst (none) other (fat32)																						
Source Setup:	<pre>src hash (SHA1): < 8FF620D2BEDCCAFE8412EDAAD56C8554F872EFBF > src hash (MD5): < D10F763B56D4CEBA2D1311C61F9FB382 > 390721968 total sectors (200049647616 bytes) 24320/254/63 (max cyl/hd values) 24321/255/63 (number of cyl/hd) IDE disk: Model (WDC WD2000JB-00KFA0) serial # (WD-WMAMR1031111) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 390700737 0000/001/01 1023/254/63 Boot 07 NTFS 2 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 3 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 4 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 390700737 sectors 200038777344 bytes</pre>																						
Log Highlights:	<pre>Actual Date:04/13/07 05:36:50PM File Integrity:Completely Verified, 0 Errors Acquisition Hash:d10f763b56d4ceba2d1311c61f9fb382 Verify Hash:d10f763b56d4ceba2d1311c61f9fb382 EnCase Version:5.05f System Version:Windows 2003 Server Error Granularity:64 Read Errors:0 Missing Sector Errors:0 CRC Errors:0 Total Size:200,049,647,616 bytes (186.3GB) Total Sectors:390,721,968 Settings: fill none size fat Write Block: 4 FastBloc IDE</pre>																						
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-01 Source acquired using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AM-02 Source is type DS.</td> <td>as expected</td> </tr> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AM-05 An image is created on file system type FS.</td> <td>as expected</td> </tr> <tr> <td>AM-06 All visible sectors acquired.</td> <td>as expected</td> </tr> <tr> <td>AM-08 All sectors accurately acquired.</td> <td>as expected</td> </tr> <tr> <td>AO-01 Image file is complete and accurate.</td> <td>as expected</td> </tr> <tr> <td>AO-05 Multifile image created.</td> <td>as expected</td> </tr> <tr> <td>AO-22 Tool calculates hashes by block.</td> <td>option not available</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-01 Source acquired using interface AI.	as expected	AM-02 Source is type DS.	as expected	AM-03 Execution environment is XE.	as expected	AM-05 An image is created on file system type FS.	as expected	AM-06 All visible sectors acquired.	as expected	AM-08 All sectors accurately acquired.	as expected	AO-01 Image file is complete and accurate.	as expected	AO-05 Multifile image created.	as expected	AO-22 Tool calculates hashes by block.	option not available	AO-23 Logged information is correct.	as expected
Assertion & Expected Result	Actual Result																						
AM-01 Source acquired using interface AI.	as expected																						
AM-02 Source is type DS.	as expected																						
AM-03 Execution environment is XE.	as expected																						
AM-05 An image is created on file system type FS.	as expected																						
AM-06 All visible sectors acquired.	as expected																						
AM-08 All sectors accurately acquired.	as expected																						
AO-01 Image file is complete and accurate.	as expected																						
AO-05 Multifile image created.	as expected																						
AO-22 Tool calculates hashes by block.	option not available																						
AO-23 Logged information is correct.	as expected																						

Test Case DA-06-ATA48 EnCase 5.05f		
	AO-24 Source is unchanged by acquisition.	not checked
Analysis:	Expected results achieved	

5.2.3 DA-06-FLOPPY

Test Case DA-06-FLOPPY EnCase 5.05f																									
Case Summary:	DA-06 Acquire a physical device using access interface AI to an image file.																								
Assertions:	<p>AM-01 The tool uses access interface SRC-AI to access the digital source.</p> <p>AM-02 The tool acquires digital source DS.</p> <p>AM-03 The tool executes in execution environment XE.</p> <p>AM-05 If image file creation is specified, the tool creates an image file on file system type FS.</p> <p>AM-06 All visible sectors are acquired from the digital source.</p> <p>AM-08 All sectors acquired from the digital source are acquired accurately.</p> <p>AO-01 If the tool creates an image file, the data represented by the image file is the same as the data acquired by the tool.</p> <p>AO-05 If the tool creates a multi-file image of a requested size then all the individual files shall be no larger than the requested size.</p> <p>AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p> <p>AO-24 If the tool executes in a forensically safe execution environment, the digital source is unchanged by the acquisition process.</p>																								
Tester Name:	slm																								
Test Host:	joe																								
Test Date:	Wed Apr 18 17:28:37 2007																								
Drives:	src(floppy) dst (none) other (fat32)																								
Source Setup:	<p>src hash (SHA1): < e2863334ac7eaabc7c8a0d62eb0d3b3af29f2c40 ></p> <p>src hash (MD5): < 17f6a5925be2f38eedaf435ff8b6a6f4 ></p> <p>Floppy disk</p>																								
Log Highlights:	<p>Start: 04/18/07 06:26:27PM</p> <p>Acquisition Hash: 17F6A5925BE2F38EEDAF435FF8B6A6F4</p> <p>Total Capacity:1,457,664 bytes (1.4MB)</p> <p>Total Clusters:2,847Unallocated:1,380,352 bytes (1.3MB)</p> <p>OEM Version:MSDOS5.0Serial Number:AC00-86E5</p> <p>Actual Date:04/18/07 06:26:27PM</p> <p>File Integrity:Completely Verified, 0 Errors</p> <p>Acquisition Hash:17f6a5925be2f38eedaf435ff8b6a6f4</p> <p>Verify Hash:17f6a5925be2f38eedaf435ff8b6a6f4</p> <p>EnCase Version:5.05f</p> <p>System Version:Windows 2000</p> <p>Error Granularity:64</p> <p>Read Errors:0</p> <p>Missing Sector Errors:0</p> <p>CRC Errors:0</p> <p>Total Size:1,474,560 bytes (1.4MB)</p> <p>Total Sectors:2,880</p> <p>Settings: fill none</p> <p>size cd</p> <p>Write Block: none</p>																								
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-01 Source acquired using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AM-02 Source is type DS.</td> <td>as expected</td> </tr> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AM-05 An image is created on file system type FS.</td> <td>as expected</td> </tr> <tr> <td>AM-06 All visible sectors acquired.</td> <td>as expected</td> </tr> <tr> <td>AM-08 All sectors accurately acquired.</td> <td>as expected</td> </tr> <tr> <td>AO-01 Image file is complete and accurate.</td> <td>as expected</td> </tr> <tr> <td>AO-05 Multifile image created.</td> <td>as expected</td> </tr> <tr> <td>AO-22 Tool calculates hashes by block.</td> <td>option not available</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> <tr> <td>AO-24 Source is unchanged by acquisition.</td> <td>not checked</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-01 Source acquired using interface AI.	as expected	AM-02 Source is type DS.	as expected	AM-03 Execution environment is XE.	as expected	AM-05 An image is created on file system type FS.	as expected	AM-06 All visible sectors acquired.	as expected	AM-08 All sectors accurately acquired.	as expected	AO-01 Image file is complete and accurate.	as expected	AO-05 Multifile image created.	as expected	AO-22 Tool calculates hashes by block.	option not available	AO-23 Logged information is correct.	as expected	AO-24 Source is unchanged by acquisition.	not checked
Assertion & Expected Result	Actual Result																								
AM-01 Source acquired using interface AI.	as expected																								
AM-02 Source is type DS.	as expected																								
AM-03 Execution environment is XE.	as expected																								
AM-05 An image is created on file system type FS.	as expected																								
AM-06 All visible sectors acquired.	as expected																								
AM-08 All sectors accurately acquired.	as expected																								
AO-01 Image file is complete and accurate.	as expected																								
AO-05 Multifile image created.	as expected																								
AO-22 Tool calculates hashes by block.	option not available																								
AO-23 Logged information is correct.	as expected																								
AO-24 Source is unchanged by acquisition.	not checked																								
Analysis:	Expected results achieved																								

5.2.4 DA-06-FW

Test Case DA-06-FW EnCase 5.05f	
Case Summary:	DA-06 Acquire a physical device using access interface AI to an image file.
Assertions:	<p>AM-01 The tool uses access interface SRC-AI to access the digital source.</p> <p>AM-02 The tool acquires digital source DS.</p> <p>AM-03 The tool executes in execution environment XE.</p> <p>AM-05 If image file creation is specified, the tool creates an image file on file system type FS.</p> <p>AM-06 All visible sectors are acquired from the digital source.</p> <p>AM-08 All sectors acquired from the digital source are acquired accurately.</p> <p>AO-01 If the tool creates an image file, the data represented by the image file is the same as the data acquired by the tool.</p> <p>AO-05 If the tool creates a multi-file image of a requested size then all the individual files shall be no larger than the requested size.</p> <p>AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p> <p>AO-24 If the tool executes in a forensically safe execution environment, the digital source is unchanged by the acquisition process.</p>
Tester Name:	slm
Test Host:	joe
Test Date:	Wed Apr 18 16:50:26 2007
Drives:	src(01) dst (none) other (fat32)
Source Setup:	<pre>src hash (SHA1): < A48BB5665D6DC57C22DB68E2F723DA9AA8DF82B9 > src hash (MD5): < F458F673894753FA6A0EC8B8EC63848E > 78165360 total sectors (40020664320 bytes) Model (0BB-00JHCO) serial # (WD-WMAMC74171) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057175335 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 X 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 X 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 X 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 X 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 X 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 004208967 1023/001/01 1023/254/63 82 Linux swap 14 X 029431080 027744255 1023/000/01 1023/254/63 05 extended 15 S 000000063 027744192 1023/001/01 1023/254/63 07 NTFS 16 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 020980827 sectors 10742183424 bytes 3 000032067 sectors 16418304 bytes 5 002104452 sectors 1077479424 bytes 7 004192902 sectors 2146765824 bytes 9 008401932 sectors 4301789184 bytes 11 010490382 sectors 5371075584 bytes 13 004208967 sectors 2154991104 bytes 15 027744192 sectors 14205026304 bytes</pre>
Log Highlights:	<pre>Start: 04/13/07 04:32:03PM Acquisition Hash: F458F673894753FA6A0EC8B8EC63848E Actual Date:04/13/07 04:32:03PM File Integrity:Completely Verified, 0 Errors Acquisition Hash:f458f673894753fa6a0ec8b8ec63848e Verify Hash:f458f673894753fa6a0ec8b8ec63848e EnCase Version:5.05f System Version:Windows XP Error Granularity:64 Read Errors:0</pre>

Test Case DA-06-FW EnCase 5.05f																									
	Missing Sector Errors:0 CRC Errors:0 Total Size:40,020,664,320 bytes (37.3GB) Total Sectors:78,165,360 Settings: fill none size cd Write Block: fastbloc FE 37																								
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-01 Source acquired using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AM-02 Source is type DS.</td> <td>as expected</td> </tr> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AM-05 An image is created on file system type FS.</td> <td>as expected</td> </tr> <tr> <td>AM-06 All visible sectors acquired.</td> <td>as expected</td> </tr> <tr> <td>AM-08 All sectors accurately acquired.</td> <td>as expected</td> </tr> <tr> <td>AO-01 Image file is complete and accurate.</td> <td>as expected</td> </tr> <tr> <td>AO-05 Multifile image created.</td> <td>as expected</td> </tr> <tr> <td>AO-22 Tool calculates hashes by block.</td> <td>option not available</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> <tr> <td>AO-24 Source is unchanged by acquisition.</td> <td>not checked</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-01 Source acquired using interface AI.	as expected	AM-02 Source is type DS.	as expected	AM-03 Execution environment is XE.	as expected	AM-05 An image is created on file system type FS.	as expected	AM-06 All visible sectors acquired.	as expected	AM-08 All sectors accurately acquired.	as expected	AO-01 Image file is complete and accurate.	as expected	AO-05 Multifile image created.	as expected	AO-22 Tool calculates hashes by block.	option not available	AO-23 Logged information is correct.	as expected	AO-24 Source is unchanged by acquisition.	not checked
Assertion & Expected Result	Actual Result																								
AM-01 Source acquired using interface AI.	as expected																								
AM-02 Source is type DS.	as expected																								
AM-03 Execution environment is XE.	as expected																								
AM-05 An image is created on file system type FS.	as expected																								
AM-06 All visible sectors acquired.	as expected																								
AM-08 All sectors accurately acquired.	as expected																								
AO-01 Image file is complete and accurate.	as expected																								
AO-05 Multifile image created.	as expected																								
AO-22 Tool calculates hashes by block.	option not available																								
AO-23 Logged information is correct.	as expected																								
AO-24 Source is unchanged by acquisition.	not checked																								
Analysis:	Expected results achieved																								

5.2.5 DA-06-NCAB-ENBD

Test Case DA-06-NCAB-ENBD EnCase 5.05f	
Case Summary:	DA-06 Acquire a physical device using access interface AI to an image file.
Assertions:	<p>AM-01 The tool uses access interface SRC-AI to access the digital source.</p> <p>AM-02 The tool acquires digital source DS.</p> <p>AM-03 The tool executes in execution environment XE.</p> <p>AM-05 If image file creation is specified, the tool creates an image file on file system type FS.</p> <p>AM-06 All visible sectors are acquired from the digital source.</p> <p>AM-08 All sectors acquired from the digital source are acquired accurately.</p> <p>AO-01 If the tool creates an image file, the data represented by the image file is the same as the data acquired by the tool.</p> <p>AO-05 If the tool creates a multi-file image of a requested size then all the individual files shall be no larger than the requested size.</p> <p>AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p> <p>AO-24 If the tool executes in a forensically safe execution environment, the digital source is unchanged by the acquisition process.</p>
Tester Name:	Joe
Test Host:	mrnw
Test Date:	Thu Dec 20 16:53:30 2007
Drives:	src(43) dst (none) other (01-FU)
Source Setup:	<pre>src hash (SHA1): < 888E2E7F7AD237DC7A732281DD93F325065E5871 > src hash (MD5): < BC39C3F7EE7A50E77B9BA1E65A5AEFF7 > 78125000 total sectors (4000000000 bytes) Model (0BB-75JHCO) serial # (WD-WMAMC46588) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057143205 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 X 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 X 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 X 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 X 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 X 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 004208967 1023/001/01 1023/254/63 82 Linux swap 14 X 029431080 027712125 1023/000/01 1023/254/63 05 extended 15 S 000000063 027712062 1023/001/01 1023/254/63 07 NTFS 16 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 020980827 sectors 10742183424 bytes 3 000032067 sectors 16418304 bytes 5 002104452 sectors 1077479424 bytes 7 004192902 sectors 2146765824 bytes 9 008401932 sectors 4301789184 bytes 11 010490382 sectors 5371075584 bytes 13 004208967 sectors 2154991104 bytes 15 027712062 sectors 14188575744 bytes</pre>
Log Highlights:	<pre>Start: 12/20/07 05:44:44PM Acquisition Hash: BC39C3F7EE7A50E77B9BA1E65A5AEFF7 Actual Date:12/20/07 05:44:44PM File Integrity:Completely Verified, 0 Errors Acquisition Hash:bc39c3f7ee7a50e77b9bale65a5aeef7 Verify Hash:bc39c3f7ee7a50e77b9bale65a5aeef7 EnCase Version:5.05f System Version:Windows 2003 Server Error Granularity:64 Read Errors:0</pre>

Test Case DA-06-NCAB-ENBD EnCase 5.05f																									
	Missing Sector Errors:0 CRC Errors:0 Total Size:40,000,000,000 bytes (37.3GB) Total Sectors:78,125,000 Settings: size CD fill none Write Block: none																								
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-01 Source acquired using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AM-02 Source is type DS.</td> <td>as expected</td> </tr> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AM-05 An image is created on file system type FS.</td> <td>as expected</td> </tr> <tr> <td>AM-06 All visible sectors acquired.</td> <td>as expected</td> </tr> <tr> <td>AM-08 All sectors accurately acquired.</td> <td>as expected</td> </tr> <tr> <td>AO-01 Image file is complete and accurate.</td> <td>as expected</td> </tr> <tr> <td>AO-05 Multifile image created.</td> <td>as expected</td> </tr> <tr> <td>AO-22 Tool calculates hashes by block.</td> <td>option not available</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> <tr> <td>AO-24 Source is unchanged by acquisition.</td> <td>not checked</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-01 Source acquired using interface AI.	as expected	AM-02 Source is type DS.	as expected	AM-03 Execution environment is XE.	as expected	AM-05 An image is created on file system type FS.	as expected	AM-06 All visible sectors acquired.	as expected	AM-08 All sectors accurately acquired.	as expected	AO-01 Image file is complete and accurate.	as expected	AO-05 Multifile image created.	as expected	AO-22 Tool calculates hashes by block.	option not available	AO-23 Logged information is correct.	as expected	AO-24 Source is unchanged by acquisition.	not checked
Assertion & Expected Result	Actual Result																								
AM-01 Source acquired using interface AI.	as expected																								
AM-02 Source is type DS.	as expected																								
AM-03 Execution environment is XE.	as expected																								
AM-05 An image is created on file system type FS.	as expected																								
AM-06 All visible sectors acquired.	as expected																								
AM-08 All sectors accurately acquired.	as expected																								
AO-01 Image file is complete and accurate.	as expected																								
AO-05 Multifile image created.	as expected																								
AO-22 Tool calculates hashes by block.	option not available																								
AO-23 Logged information is correct.	as expected																								
AO-24 Source is unchanged by acquisition.	not checked																								
Analysis:	Expected results achieved																								

5.2.6 DA-06-NCAB-LINEN

Test Case DA-06-NCAB-LINEN EnCase 5.05f													
Case Summary:	DA-06 Acquire a physical device using access interface AI to an image file.												
Assertions:	<p>AM-01 The tool uses access interface SRC-AI to access the digital source.</p> <p>AM-02 The tool acquires digital source DS.</p> <p>AM-03 The tool executes in execution environment XE.</p> <p>AM-05 If image file creation is specified, the tool creates an image file on file system type FS.</p> <p>AM-06 All visible sectors are acquired from the digital source.</p> <p>AM-08 All sectors acquired from the digital source are acquired accurately.</p> <p>AO-01 If the tool creates an image file, the data represented by the image file is the same as the data acquired by the tool.</p> <p>AO-05 If the tool creates a multi-file image of a requested size then all the individual files shall be no larger than the requested size.</p> <p>AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p> <p>AO-24 If the tool executes in a forensically safe execution environment, the digital source is unchanged by the acquisition process.</p>												
Tester Name:	mrmw												
Test Host:	Freddy												
Test Date:	Thu Dec 20 18:16:08 2007												
Drives:	src(cl-cf) dst (none) other (06-fu)												
Source Setup:	<pre>src hash (SHA256): < C7CF0218222DF80D5316511D6814266C7FA507C13F795AD3D323BB73C1590D80 > src hash (SHA1): < 5B8235178DF99FA307430C088F81746606638A0B > src hash (MD5): < 776DF8B4D2589E21DEBCF589EDC16D78 > 503808 total sectors (257949696 bytes) Model (CF) serial # () N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 778135908 1141509631 0357/116/40 0357/032/45 Boot 72 other 2 P 168689522 1936028240 0288/115/43 0367/114/50 Boot 65 other 3 P 1869881465 1936028192 0366/032/33 0357/032/43 Boot 79 other 4 P 2885681152 000055499 0372/097/50 0000/010/00 Boot 0D other 1 1141509631 sectors 584452931072 bytes 2 1936028240 sectors 991246458880 bytes 3 1936028192 sectors 991246434304 bytes 4 000055499 sectors 28415488 bytes</pre>												
Log Highlights:	<pre>Start: 12/20/07 06:22:18PM Acquisition Hash: 776DF8B4D2589E21DEBCF589EDC16D78 Actual Date:12/20/07 06:22:18PM File Integrity:Completely Verified, 0 Errors Acquisition Hash:776df8b4d2589e21debcf589edc16d78 Verify Hash:776df8b4d2589e21debcf589edc16d78 EnCase Version:5.05f System Version:Windows 2000 Error Granularity:64 Read Errors:0 Missing Sector Errors:0 CRC Errors:0 Total Size:257,949,696 bytes (246MB) Total Sectors:503,808 Settings: size CD fill none Write Block: none</pre>												
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-01 Source acquired using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AM-02 Source is type DS.</td> <td>as expected</td> </tr> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AM-05 An image is created on file system type FS.</td> <td>as expected</td> </tr> <tr> <td>AM-06 All visible sectors acquired.</td> <td>as expected</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-01 Source acquired using interface AI.	as expected	AM-02 Source is type DS.	as expected	AM-03 Execution environment is XE.	as expected	AM-05 An image is created on file system type FS.	as expected	AM-06 All visible sectors acquired.	as expected
Assertion & Expected Result	Actual Result												
AM-01 Source acquired using interface AI.	as expected												
AM-02 Source is type DS.	as expected												
AM-03 Execution environment is XE.	as expected												
AM-05 An image is created on file system type FS.	as expected												
AM-06 All visible sectors acquired.	as expected												

Test Case DA-06-NCAB-LINEN EnCase 5.05f		
	AM-08 All sectors accurately acquired.	as expected
	AO-01 Image file is complete and accurate.	as expected
	AO-05 Multifile image created.	as expected
	AO-22 Tool calculates hashes by block.	option not available
	AO-23 Logged information is correct.	as expected
	AO-24 Source is unchanged by acquisition.	not checked
Analysis:	Expected results achieved	

5.2.7 DA-06-PART

Test Case DA-06-PART EnCase 5.05f																									
Case Summary:	DA-06 Acquire a physical device using access interface AI to an image file.																								
Assertions:	<p>AM-01 The tool uses access interface SRC-AI to access the digital source.</p> <p>AM-02 The tool acquires digital source DS.</p> <p>AM-03 The tool executes in execution environment XE.</p> <p>AM-05 If image file creation is specified, the tool creates an image file on file system type FS.</p> <p>AM-06 All visible sectors are acquired from the digital source.</p> <p>AM-08 All sectors acquired from the digital source are acquired accurately.</p> <p>AO-01 If the tool creates an image file, the data represented by the image file is the same as the data acquired by the tool.</p> <p>AO-05 If the tool creates a multi-file image of a requested size then all the individual files shall be no larger than the requested size.</p> <p>AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p> <p>AO-24 If the tool executes in a forensically safe execution environment, the digital source is unchanged by the acquisition process.</p>																								
Tester Name:	mrmw																								
Test Host:	Frank																								
Test Date:	Wed Jun 20 11:01:43 2007																								
Drives:	src(24-FU2) dst (none) other (02-fu)																								
Source Setup:	<p>src hash (SHA1): < A78EDB5E90298D0CDF199B4B62119F81208A252A ></p> <p>src hash (MD5): < 90311DDF672B8CBA0869A46F4A455A7E ></p> <p>39070080 total sectors (20003880960 bytes)</p> <p>19076/063/32 (max cyl/hd values)</p> <p>19077/064/32 (number of cyl/hd)</p> <p>Model (ATCS04-0) serial # (CSH206D9DSEL)</p> <p>MD5 sectors 3907008-7814015 drive 24-fu2: 4392FA47D09ED9BE561E30F6E3CCC03D</p>																								
Log Highlights:	<p>Start: 06/20/07 11:24:04AM</p> <p>Acquisition Hash: 90311DDF672B8CBA0869A46F4A455A7E</p> <p>Start: 06/20/07 12:07:41PM</p> <p>Start Sector: 3,907,008</p> <p>Stop Sector: 7,814,015</p> <p>Hash Value: 4392FA47D09ED9BE561E30F6E3CCC03D</p> <p>Settings: fill none</p> <p>size cdWrite Block: tableau USB writeblocker 18</p>																								
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-01 Source acquired using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AM-02 Source is type DS.</td> <td>as expected</td> </tr> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AM-05 An image is created on file system type FS.</td> <td>as expected</td> </tr> <tr> <td>AM-06 All visible sectors acquired.</td> <td>as expected</td> </tr> <tr> <td>AM-08 All sectors accurately acquired.</td> <td>as expected</td> </tr> <tr> <td>AO-01 Image file is complete and accurate.</td> <td>as expected</td> </tr> <tr> <td>AO-05 Multifile image created.</td> <td>as expected</td> </tr> <tr> <td>AO-22 Tool calculates hashes by block.</td> <td>option not available</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> <tr> <td>AO-24 Source is unchanged by acquisition.</td> <td>not checked</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-01 Source acquired using interface AI.	as expected	AM-02 Source is type DS.	as expected	AM-03 Execution environment is XE.	as expected	AM-05 An image is created on file system type FS.	as expected	AM-06 All visible sectors acquired.	as expected	AM-08 All sectors accurately acquired.	as expected	AO-01 Image file is complete and accurate.	as expected	AO-05 Multifile image created.	as expected	AO-22 Tool calculates hashes by block.	option not available	AO-23 Logged information is correct.	as expected	AO-24 Source is unchanged by acquisition.	not checked
Assertion & Expected Result	Actual Result																								
AM-01 Source acquired using interface AI.	as expected																								
AM-02 Source is type DS.	as expected																								
AM-03 Execution environment is XE.	as expected																								
AM-05 An image is created on file system type FS.	as expected																								
AM-06 All visible sectors acquired.	as expected																								
AM-08 All sectors accurately acquired.	as expected																								
AO-01 Image file is complete and accurate.	as expected																								
AO-05 Multifile image created.	as expected																								
AO-22 Tool calculates hashes by block.	option not available																								
AO-23 Logged information is correct.	as expected																								
AO-24 Source is unchanged by acquisition.	not checked																								
Analysis:	Expected results achieved																								

5.2.8 DA-06-SCSI

Test Case DA-06-SCSI EnCase 5.05f																			
Case Summary:	DA-06 Acquire a physical device using access interface AI to an image file.																		
Assertions:	<p>AM-01 The tool uses access interface SRC-AI to access the digital source.</p> <p>AM-02 The tool acquires digital source DS.</p> <p>AM-03 The tool executes in execution environment XE.</p> <p>AM-05 If image file creation is specified, the tool creates an image file on file system type FS.</p> <p>AM-06 All visible sectors are acquired from the digital source.</p> <p>AM-08 All sectors acquired from the digital source are acquired accurately.</p> <p>AO-01 If the tool creates an image file, the data represented by the image file is the same as the data acquired by the tool.</p> <p>AO-05 If the tool creates a multi-file image of a requested size then all the individual files shall be no larger than the requested size.</p> <p>AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p> <p>AO-24 If the tool executes in a forensically safe execution environment, the digital source is unchanged by the acquisition process.</p>																		
Tester Name:	mrmw																		
Test Host:	Frank																		
Test Date:	Thu Apr 12 09:26:34 2007																		
Drives:	src(2A) dst (none) other (IDE)																		
Source Setup:	<pre>src hash (SHA256): < AE8E839101661367D92803D5F5D408268635EFD8A05FEA633838CDC3919F5ABA > src hash (SHA1): < F5F9F2903DCAB895F36E270FB22A722E27918125 > src hash (MD5): < 91E0AC905F682ECF6DE4E9835089B519 > 17783249 total sectors (9105023488 bytes) Model (QM39100TD-SCA) serial # (PCB=20-116711-06 HDAQM39100TD-SCA) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 017751762 0000/001/01 1023/254/63 Boot 07 NTFS 2 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 3 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 4 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 017751762 sectors 9088902144 bytes</pre>																		
Log Highlights:	<pre>Start: 04/12/07 01:42:32PM Acquisition Hash: 91E0AC905F682ECF6DE4E9835089B519 Actual Date:04/12/07 01:42:32PM File Integrity:Completely Verified, 0 Errors Acquisition Hash:91e0ac905f682ecf6de4e9835089b519 Verify Hash:91e0ac905f682ecf6de4e9835089b519 EnCase Version:5.05f System Version:Windows XP Error Granularity:64 Read Errors:0 Missing Sector Errors:0 CRC Errors:0 Total Size:9,105,023,488 bytes (8.5GB) Total Sectors:17,783,249 Settings: size CD(640 MB) fill none block size 64 Write Block: FastBloc SE</pre>																		
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-01 Source acquired using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AM-02 Source is type DS.</td> <td>as expected</td> </tr> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AM-05 An image is created on file system type FS.</td> <td>as expected</td> </tr> <tr> <td>AM-06 All visible sectors acquired.</td> <td>as expected</td> </tr> <tr> <td>AM-08 All sectors accurately acquired.</td> <td>as expected</td> </tr> <tr> <td>AO-01 Image file is complete and accurate.</td> <td>as expected</td> </tr> <tr> <td>AO-05 Multifile image created.</td> <td>as expected</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-01 Source acquired using interface AI.	as expected	AM-02 Source is type DS.	as expected	AM-03 Execution environment is XE.	as expected	AM-05 An image is created on file system type FS.	as expected	AM-06 All visible sectors acquired.	as expected	AM-08 All sectors accurately acquired.	as expected	AO-01 Image file is complete and accurate.	as expected	AO-05 Multifile image created.	as expected
Assertion & Expected Result	Actual Result																		
AM-01 Source acquired using interface AI.	as expected																		
AM-02 Source is type DS.	as expected																		
AM-03 Execution environment is XE.	as expected																		
AM-05 An image is created on file system type FS.	as expected																		
AM-06 All visible sectors acquired.	as expected																		
AM-08 All sectors accurately acquired.	as expected																		
AO-01 Image file is complete and accurate.	as expected																		
AO-05 Multifile image created.	as expected																		

Test Case DA-06-SCSI EnCase 5.05f		
	AO-22 Tool calculates hashes by block.	option not available
	AO-23 Logged information is correct.	as expected
	AO-24 Source is unchanged by acquisition.	not checked
Analysis:	Expected results achieved	

5.2.9 DA-06-USB

Test Case DA-06-USB EnCase 5.05f	
Case Summary:	DA-06 Acquire a physical device using access interface AI to an image file.
Assertions:	<p>AM-01 The tool uses access interface SRC-AI to access the digital source.</p> <p>AM-02 The tool acquires digital source DS.</p> <p>AM-03 The tool executes in execution environment XE.</p> <p>AM-05 If image file creation is specified, the tool creates an image file on file system type FS.</p> <p>AM-06 All visible sectors are acquired from the digital source.</p> <p>AM-08 All sectors acquired from the digital source are acquired accurately.</p> <p>AO-01 If the tool creates an image file, the data represented by the image file is the same as the data acquired by the tool.</p> <p>AO-05 If the tool creates a multi-file image of a requested size then all the individual files shall be no larger than the requested size.</p> <p>AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p> <p>AO-24 If the tool executes in a forensically safe execution environment, the digital source is unchanged by the acquisition process.</p>
Tester Name:	mrmw
Test Host:	Frank
Test Date:	Fri Apr 6 08:17:56 2007
Drives:	src(01) dst (none) other (IDE)
Source Setup:	<pre>src hash (SHA1): < A48BB5665D6DC57C22DB68E2F723DA9AA8DF82B9 > src hash (MD5): < F458F673894753FA6A0EC8B8EC63848E > 78165360 total sectors (40020664320 bytes) Model (0BB-00JHCO) serial # (WD-WMAMC74171) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057175335 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 X 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 X 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 X 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 X 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 X 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 004208967 1023/001/01 1023/254/63 82 Linux swap 14 X 029431080 027744255 1023/000/01 1023/254/63 05 extended 15 S 000000063 027744192 1023/001/01 1023/254/63 07 NTFS 16 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 020980827 sectors 10742183424 bytes 3 000032067 sectors 16418304 bytes 5 002104452 sectors 1077479424 bytes 7 004192902 sectors 2146765824 bytes 9 008401932 sectors 4301789184 bytes 11 010490382 sectors 5371075584 bytes 13 004208967 sectors 2154991104 bytes 15 027744192 sectors 14205026304 bytes</pre>
Log Highlights:	<pre>Start: 04/06/07 12:38:27PM Acquisition Hash: F458F673894753FA6A0EC8B8EC63848E Actual Date:04/06/07 12:38:27PM File Integrity:Completely Verified, 0 Errors Acquisition Hash:f458f673894753fa6a0ec8b8ec63848e Verify Hash:f458f673894753fa6a0ec8b8ec63848e EnCase Version:5.05f System Version:Windows 2000 Error Granularity:64 Read Errors:0</pre>

Test Case DA-06-USB EnCase 5.05f																									
	Missing Sector Errors:0 CRC Errors:0 Total Size:40,020,664,320 bytes (37.3GB) Total Sectors:78,165,360 Settings: size CD (640MB) fill none blocksize 64 Write Block: 37 WiebeTech Combo Dock																								
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-01 Source acquired using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AM-02 Source is type DS.</td> <td>as expected</td> </tr> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AM-05 An image is created on file system type FS.</td> <td>as expected</td> </tr> <tr> <td>AM-06 All visible sectors acquired.</td> <td>as expected</td> </tr> <tr> <td>AM-08 All sectors accurately acquired.</td> <td>as expected</td> </tr> <tr> <td>AO-01 Image file is complete and accurate.</td> <td>as expected</td> </tr> <tr> <td>AO-05 Multifile image created.</td> <td>as expected</td> </tr> <tr> <td>AO-22 Tool calculates hashes by block.</td> <td>option not available</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> <tr> <td>AO-24 Source is unchanged by acquisition.</td> <td>not checked</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-01 Source acquired using interface AI.	as expected	AM-02 Source is type DS.	as expected	AM-03 Execution environment is XE.	as expected	AM-05 An image is created on file system type FS.	as expected	AM-06 All visible sectors acquired.	as expected	AM-08 All sectors accurately acquired.	as expected	AO-01 Image file is complete and accurate.	as expected	AO-05 Multifile image created.	as expected	AO-22 Tool calculates hashes by block.	option not available	AO-23 Logged information is correct.	as expected	AO-24 Source is unchanged by acquisition.	not checked
Assertion & Expected Result	Actual Result																								
AM-01 Source acquired using interface AI.	as expected																								
AM-02 Source is type DS.	as expected																								
AM-03 Execution environment is XE.	as expected																								
AM-05 An image is created on file system type FS.	as expected																								
AM-06 All visible sectors acquired.	as expected																								
AM-08 All sectors accurately acquired.	as expected																								
AO-01 Image file is complete and accurate.	as expected																								
AO-05 Multifile image created.	as expected																								
AO-22 Tool calculates hashes by block.	option not available																								
AO-23 Logged information is correct.	as expected																								
AO-24 Source is unchanged by acquisition.	not checked																								
Analysis:	Expected results achieved																								

5.2.10 DA-07-CF

Test Case DA-07-CF EnCase 5.05f															
Case Summary:	DA-07 Acquire a digital source of type DS to an image file.														
Assertions:	<p>AM-01 The tool uses access interface SRC-AI to access the digital source.</p> <p>AM-02 The tool acquires digital source DS.</p> <p>AM-03 The tool executes in execution environment XE.</p> <p>AM-05 If image file creation is specified, the tool creates an image file on file system type FS.</p> <p>AM-06 All visible sectors are acquired from the digital source.</p> <p>AM-08 All sectors acquired from the digital source are acquired accurately.</p> <p>AO-01 If the tool creates an image file, the data represented by the image file is the same as the data acquired by the tool.</p> <p>AO-05 If the tool creates a multi-file image of a requested size then all the individual files shall be no larger than the requested size.</p> <p>AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p> <p>AO-24 If the tool executes in a forensically safe execution environment, the digital source is unchanged by the acquisition process.</p>														
Tester Name:	slm														
Test Host:	joe														
Test Date:	Tue Apr 3 15:09:00 2007														
Drives:	src(cl-cf) dst (none) other (ntfs)														
Source Setup:	<pre>src hash (SHA256): < C7CF0218222DF80D5316511D6814266C7FA507C13F795AD3D323BB73C1590D80 > src hash (SHA1): < 5B8235178DF99FA307430C088F81746606638A0B > src hash (MD5): < 776DF8B4D2589E21DEBCF589EDC16D78 > 503808 total sectors (257949696 bytes) Model (CF) serial # () N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 778135908 1141509631 0357/116/40 0357/032/45 Boot 72 other 2 P 168689522 1936028240 0288/115/43 0367/114/50 Boot 65 other 3 P 1869881465 1936028192 0366/032/33 0357/032/43 Boot 79 other 4 P 2885681152 000055499 0372/097/50 0000/010/00 Boot 0D other 1 1141509631 sectors 584452931072 bytes 2 1936028240 sectors 991246458880 bytes 3 1936028192 sectors 991246434304 bytes 4 000055499 sectors 28415488 bytes</pre>														
Log Highlights:	<pre>Start: 04/03/07 04:58:51PM Acquisition Hash: 776DF8B4D2589E21DEBCF589EDC16D78 Actual Date:04/03/07 04:58:51PM File Integrity:Completely Verified, 0 Errors Acquisition Hash:776df8b4d2589e21debcf589edc16d78 Verify Hash:776df8b4d2589e21debcf589edc16d78 EnCase Version:5.05f System Version:Windows 2003 Server Error Granularity:64 Read Errors:0 Missing Sector Errors:0 CRC Errors:0 Total Size:257,949,696 bytes (246MB) Total Sectors:503,808 Settings: Size cd fill noneWrite Block: 7 UltraBlock FCR</pre>														
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-01 Source acquired using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AM-02 Source is type DS.</td> <td>as expected</td> </tr> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AM-05 An image is created on file system type FS.</td> <td>as expected</td> </tr> <tr> <td>AM-06 All visible sectors acquired.</td> <td>as expected</td> </tr> <tr> <td>AM-08 All sectors accurately acquired.</td> <td>as expected</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-01 Source acquired using interface AI.	as expected	AM-02 Source is type DS.	as expected	AM-03 Execution environment is XE.	as expected	AM-05 An image is created on file system type FS.	as expected	AM-06 All visible sectors acquired.	as expected	AM-08 All sectors accurately acquired.	as expected
Assertion & Expected Result	Actual Result														
AM-01 Source acquired using interface AI.	as expected														
AM-02 Source is type DS.	as expected														
AM-03 Execution environment is XE.	as expected														
AM-05 An image is created on file system type FS.	as expected														
AM-06 All visible sectors acquired.	as expected														
AM-08 All sectors accurately acquired.	as expected														

Test Case DA-07-CF EnCase 5.05f		
	AO-01 Image file is complete and accurate.	as expected
	AO-05 Multifile image created.	as expected
	AO-22 Tool calculates hashes by block.	option not available
	AO-23 Logged information is correct.	as expected
	AO-24 Source is unchanged by acquisition.	not checked
Analysis:	Expected results achieved	

5.2.11 DA-07-F12

Test Case DA-07-F12 EnCase 5.05f					
Case Summary:	DA-07 Acquire a digital source of type DS to an image file.				
Assertions:	<p>AM-01 The tool uses access interface SRC-AI to access the digital source.</p> <p>AM-02 The tool acquires digital source DS.</p> <p>AM-03 The tool executes in execution environment XE.</p> <p>AM-05 If image file creation is specified, the tool creates an image file on file system type FS.</p> <p>AM-06 All visible sectors are acquired from the digital source.</p> <p>AM-08 All sectors acquired from the digital source are acquired accurately.</p> <p>AO-01 If the tool creates an image file, the data represented by the image file is the same as the data acquired by the tool.</p> <p>AO-05 If the tool creates a multi-file image of a requested size then all the individual files shall be no larger than the requested size.</p> <p>AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p> <p>AO-24 If the tool executes in a forensically safe execution environment, the digital source is unchanged by the acquisition process.</p>				
Tester Name:	mrmw				
Test Host:	Frank				
Test Date:	Wed Jun 20 14:14:50 2007				
Drives:	src(01) dst (none) other (02-fu)				
Source Setup:	<pre>src hash (SHA1): < A48BB5665D6DC57C22DB68E2F723DA9AA8DF82B9 > src hash (MD5): < F458F673894753FA6A0EC8B8EC63848E > 78165360 total sectors (40020664320 bytes) Model (0BB-00JHCO) serial # (WD-WMAMC74171) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057175335 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 X 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 X 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 X 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 X 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 X 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 004208967 1023/001/01 1023/254/63 82 Linux swap 14 X 029431080 027744255 1023/000/01 1023/254/63 05 extended 15 S 000000063 027744192 1023/001/01 1023/254/63 07 NTFS 16 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 020980827 sectors 10742183424 bytes 3 000032067 sectors 16418304 bytes 5 002104452 sectors 1077479424 bytes 7 004192902 sectors 2146765824 bytes 9 008401932 sectors 4301789184 bytes 11 010490382 sectors 5371075584 bytes 13 004208967 sectors 2154991104 bytes 15 027744192 sectors 14205026304 bytes 01F12-md5 16418303 E20E3CFEA80BF6F2D2AA75E829CC8CD9 01F12-sha1 16418303 F8B72B65436DE3BD394ACFF71D405D0389C0E9B7</pre>				
Log Highlights:	<pre>Start: 06/20/07 03:01:39PM Acquisition Hash: E20E3CFEA80BF6F2D2AA75E829CC8CD9 Settings: fill none size cdWrite Block: fastbloc FE 44</pre>				
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-01 Source acquired using interface AI.</td> <td>as expected</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-01 Source acquired using interface AI.	as expected
Assertion & Expected Result	Actual Result				
AM-01 Source acquired using interface AI.	as expected				

Test Case DA-07-F12 EnCase 5.05f		
	AM-02 Source is type DS.	as expected
	AM-03 Execution environment is XE.	as expected
	AM-05 An image is created on file system type FS.	as expected
	AM-06 All visible sectors acquired.	as expected
	AM-08 All sectors accurately acquired.	as expected
	AO-01 Image file is complete and accurate.	as expected
	AO-05 Multifile image created.	as expected
	AO-22 Tool calculates hashes by block.	option not available
	AO-23 Logged information is correct.	as expected
	AO-24 Source is unchanged by acquisition.	not checked
Analysis:	Expected results achieved	

5.2.12 DA-07-F16

Test Case DA-07-F16 EnCase 5.05f	
Case Summary:	DA-07 Acquire a digital source of type DS to an image file.
Assertions:	<p>AM-01 The tool uses access interface SRC-AI to access the digital source.</p> <p>AM-02 The tool acquires digital source DS.</p> <p>AM-03 The tool executes in execution environment XE.</p> <p>AM-05 If image file creation is specified, the tool creates an image file on file system type FS.</p> <p>AM-06 All visible sectors are acquired from the digital source.</p> <p>AM-08 All sectors acquired from the digital source are acquired accurately.</p> <p>AO-01 If the tool creates an image file, the data represented by the image file is the same as the data acquired by the tool.</p> <p>AO-05 If the tool creates a multi-file image of a requested size then all the individual files shall be no larger than the requested size.</p> <p>AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p> <p>AO-24 If the tool executes in a forensically safe execution environment, the digital source is unchanged by the acquisition process.</p>
Tester Name:	slm
Test Host:	joe
Test Date:	Fri Apr 20 10:05:29 2007
Drives:	src(43) dst (none) other (fat32)
Source Setup:	<pre>src hash (SHA1): < 888E2E7F7AD237DC7A732281DD93F325065E5871 > src hash (MD5): < BC39C3F7EE7A50E77B9BA1E65A5AEEF7 > 78125000 total sectors (4000000000 bytes) Model (0BB-75JHCO) serial # (WD-WMAMC46588) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057143205 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 X 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 X 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 X 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 X 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 X 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 004208967 1023/001/01 1023/254/63 82 Linux swap 14 X 029431080 027712125 1023/000/01 1023/254/63 05 extended 15 S 000000063 027712062 1023/001/01 1023/254/63 07 NTFS 16 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 020980827 sectors 10742183424 bytes 3 000032067 sectors 16418304 bytes 5 002104452 sectors 1077479424 bytes 7 004192902 sectors 2146765824 bytes 9 008401932 sectors 4301789184 bytes 11 010490382 sectors 5371075584 bytes 13 004208967 sectors 2154991104 bytes 15 027712062 sectors 14188575744 bytes 43F16-md5sum 1077479423 37E81FFB31C3CB38AA48B2237500908E</pre>
Log Highlights:	<pre>Start: 04/20/07 10:26:36AM Acquisition Hash: 37E81FFB31C3CB38AA48B2237500908E Total Capacity:1,077,313,536 bytes (1GB) Total Clusters:32,877Unallocated:1,076,953,088 bytes (1GB) OEM Version:MSWIN4.0Serial Number:CCCF-3DAD Actual Date:04/20/07 10:26:36AM File Integrity:Completely Verified, 0 Errors Acquisition Hash:37e81ffb31c3cb38aa48b2237500908e Verify Hash:37e81ffb31c3cb38aa48b2237500908e</pre>

Test Case DA-07-F16 EnCase 5.05f																									
	EnCase Version:5.05f System Version:Windows 2003 Server Error Granularity:64 Read Errors:0 Missing Sector Errors:0 CRC Errors:0 Total Size:1,077,479,424 bytes (1GB) Total Sectors:2,104,452 Settings: size fat Write Block: 42 FastBloc LE																								
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-01 Source acquired using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AM-02 Source is type DS.</td> <td>as expected</td> </tr> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AM-05 An image is created on file system type FS.</td> <td>as expected</td> </tr> <tr> <td>AM-06 All visible sectors acquired.</td> <td>as expected</td> </tr> <tr> <td>AM-08 All sectors accurately acquired.</td> <td>as expected</td> </tr> <tr> <td>AO-01 Image file is complete and accurate.</td> <td>as expected</td> </tr> <tr> <td>AO-05 Multifile image created.</td> <td>as expected</td> </tr> <tr> <td>AO-22 Tool calculates hashes by block.</td> <td>option not available</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> <tr> <td>AO-24 Source is unchanged by acquisition.</td> <td>not checked</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-01 Source acquired using interface AI.	as expected	AM-02 Source is type DS.	as expected	AM-03 Execution environment is XE.	as expected	AM-05 An image is created on file system type FS.	as expected	AM-06 All visible sectors acquired.	as expected	AM-08 All sectors accurately acquired.	as expected	AO-01 Image file is complete and accurate.	as expected	AO-05 Multifile image created.	as expected	AO-22 Tool calculates hashes by block.	option not available	AO-23 Logged information is correct.	as expected	AO-24 Source is unchanged by acquisition.	not checked
Assertion & Expected Result	Actual Result																								
AM-01 Source acquired using interface AI.	as expected																								
AM-02 Source is type DS.	as expected																								
AM-03 Execution environment is XE.	as expected																								
AM-05 An image is created on file system type FS.	as expected																								
AM-06 All visible sectors acquired.	as expected																								
AM-08 All sectors accurately acquired.	as expected																								
AO-01 Image file is complete and accurate.	as expected																								
AO-05 Multifile image created.	as expected																								
AO-22 Tool calculates hashes by block.	option not available																								
AO-23 Logged information is correct.	as expected																								
AO-24 Source is unchanged by acquisition.	not checked																								
Analysis:	Expected results achieved																								

5.2.13 DA-07-F32

Test Case DA-07-F32 EnCase 5.05f	
Case Summary:	DA-07 Acquire a digital source of type DS to an image file.
Assertions:	<p>AM-01 The tool uses access interface SRC-AI to access the digital source.</p> <p>AM-02 The tool acquires digital source DS.</p> <p>AM-03 The tool executes in execution environment XE.</p> <p>AM-05 If image file creation is specified, the tool creates an image file on file system type FS.</p> <p>AM-06 All visible sectors are acquired from the digital source.</p> <p>AM-08 All sectors acquired from the digital source are acquired accurately.</p> <p>AO-01 If the tool creates an image file, the data represented by the image file is the same as the data acquired by the tool.</p> <p>AO-05 If the tool creates a multi-file image of a requested size then all the individual files shall be no larger than the requested size.</p> <p>AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p> <p>AO-24 If the tool executes in a forensically safe execution environment, the digital source is unchanged by the acquisition process.</p>
Tester Name:	slm
Test Host:	joe
Test Date:	Tue Apr 10 15:00:04 2007
Drives:	src(01) dst (none) other (ntfs)
Source Setup:	<pre>src hash (SHA1): < A48BB5665D6DC57C22DB68E2F723DA9AA8DF82B9 > src hash (MD5): < F458F673894753FA6A0EC8B8EC63848E > 78165360 total sectors (40020664320 bytes) Model (0BB-00JHCO) serial # (WD-WMAMC74171) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057175335 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 004208967 1023/001/01 1023/254/63 82 Linux swap 14 x 029431080 027744255 1023/000/01 1023/254/63 05 extended 15 S 000000063 027744192 1023/001/01 1023/254/63 07 NTFS 16 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 020980827 sectors 10742183424 bytes 3 000032067 sectors 16418304 bytes 5 002104452 sectors 1077479424 bytes 7 004192902 sectors 2146765824 bytes 9 008401932 sectors 4301789184 bytes 11 010490382 sectors 5371075584 bytes 13 004208967 sectors 2154991104 bytes 15 027744192 sectors 14205026304 bytes 01F32-md5 4301789183 BFF7DC64C54339DA2A9D7972C076B514 01F32-sha1 4301789183 B861D9E999F39750B484FFB693FF69DEC090C6B8</pre>
Log Highlights:	<pre>Start: 04/10/07 03:30:02PM Acquisition Hash: BFF7DC64C54339DA2A9D7972C076B514 Total Capacity:4,293,382,144 bytes (4GB) Total Clusters:1,048,189Unallocated:4,292,919,296 bytes (4GB) OEM Version:MSWIN4.1Serial Number:5AEE-05B5 Actual Date:04/10/07 03:30:02PM File Integrity:Completely Verified, 0 Errors Acquisition Hash:bff7dc64c54339da2a9d7972c076b514</pre>

Test Case DA-07-F32 EnCase 5.05f																									
	Verify Hash: bff7dc64c54339da2a9d7972c076b514 EnCase Version: 5.05f System Version: Windows XP Error Granularity: 64 Read Errors: 0 Missing Sector Errors: 0 CRC Errors: 0 Total Size: 4,301,789,184 bytes (4GB) Total Sectors: 8,401,932 Settings: fill none size cd Write Block: 44 FastBloc FE																								
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-01 Source acquired using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AM-02 Source is type DS.</td> <td>as expected</td> </tr> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AM-05 An image is created on file system type FS.</td> <td>as expected</td> </tr> <tr> <td>AM-06 All visible sectors acquired.</td> <td>as expected</td> </tr> <tr> <td>AM-08 All sectors accurately acquired.</td> <td>as expected</td> </tr> <tr> <td>AO-01 Image file is complete and accurate.</td> <td>as expected</td> </tr> <tr> <td>AO-05 Multifile image created.</td> <td>as expected</td> </tr> <tr> <td>AO-22 Tool calculates hashes by block.</td> <td>option not available</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> <tr> <td>AO-24 Source is unchanged by acquisition.</td> <td>not checked</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-01 Source acquired using interface AI.	as expected	AM-02 Source is type DS.	as expected	AM-03 Execution environment is XE.	as expected	AM-05 An image is created on file system type FS.	as expected	AM-06 All visible sectors acquired.	as expected	AM-08 All sectors accurately acquired.	as expected	AO-01 Image file is complete and accurate.	as expected	AO-05 Multifile image created.	as expected	AO-22 Tool calculates hashes by block.	option not available	AO-23 Logged information is correct.	as expected	AO-24 Source is unchanged by acquisition.	not checked
Assertion & Expected Result	Actual Result																								
AM-01 Source acquired using interface AI.	as expected																								
AM-02 Source is type DS.	as expected																								
AM-03 Execution environment is XE.	as expected																								
AM-05 An image is created on file system type FS.	as expected																								
AM-06 All visible sectors acquired.	as expected																								
AM-08 All sectors accurately acquired.	as expected																								
AO-01 Image file is complete and accurate.	as expected																								
AO-05 Multifile image created.	as expected																								
AO-22 Tool calculates hashes by block.	option not available																								
AO-23 Logged information is correct.	as expected																								
AO-24 Source is unchanged by acquisition.	not checked																								
Analysis:	Expected results achieved																								

5.2.14 DA-07-F32X

Test Case DA-07-F32X EnCase 5.05f	
Case Summary:	DA-07 Acquire a digital source of type DS to an image file.
Assertions:	<p>AM-01 The tool uses access interface SRC-AI to access the digital source.</p> <p>AM-02 The tool acquires digital source DS.</p> <p>AM-03 The tool executes in execution environment XE.</p> <p>AM-05 If image file creation is specified, the tool creates an image file on file system type FS.</p> <p>AM-06 All visible sectors are acquired from the digital source.</p> <p>AM-08 All sectors acquired from the digital source are acquired accurately.</p> <p>AO-01 If the tool creates an image file, the data represented by the image file is the same as the data acquired by the tool.</p> <p>AO-05 If the tool creates a multi-file image of a requested size then all the individual files shall be no larger than the requested size.</p> <p>AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p> <p>AO-24 If the tool executes in a forensically safe execution environment, the digital source is unchanged by the acquisition process.</p>
Tester Name:	slm
Test Host:	joe
Test Date:	Fri Apr 20 10:27:17 2007
Drives:	src(43) dst (none) other (fat32)
Source Setup:	<pre>src hash (SHA1): < 888E2E7F7AD237DC7A732281DD93F325065E5871 > src hash (MD5): < BC39C3F7EE7A50E77B9BA1E65A5AEEF7 > 78125000 total sectors (40000000000 bytes) Model (0BB-75JHCO) serial # (WD-WMAMC46588) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057143205 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 004208967 1023/001/01 1023/254/63 82 Linux swap 14 x 029431080 027712125 1023/000/01 1023/254/63 05 extended 15 S 000000063 027712062 1023/001/01 1023/254/63 07 NTFS 16 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 020980827 sectors 10742183424 bytes 3 000032067 sectors 16418304 bytes 5 002104452 sectors 1077479424 bytes 7 004192902 sectors 2146765824 bytes 9 008401932 sectors 4301789184 bytes 11 010490382 sectors 5371075584 bytes 13 004208967 sectors 2154991104 bytes 15 027712062 sectors 14188575744 bytes 43F32x-md5sum 10742183424 5980CB0FA68E9862C65765DF50F00906</pre>
Log Highlights:	<pre>Start: 04/20/07 10:37:36AM Acquisition Hash: 5980CB0FA68E9862C65765DF50F00906 Total Capacity:10,731,683,840 bytes (10GB) Total Clusters:1,310,020Unallocated:10,729,906,176 bytes (10GB) OEM Version:MSWIN4.1Serial Number:4445-13C7 Actual Date:04/20/07 10:37:36AM File Integrity:Completely Verified, 0 Errors Acquisition Hash:5980cb0fa68e9862c65765df50f00906 Verify Hash:5980cb0fa68e9862c65765df50f00906</pre>

Test Case DA-07-F32X EnCase 5.05f																									
	EnCase Version:5.05f System Version:Windows 2000 Error Granularity:64 Read Errors:0 Missing Sector Errors:0 CRC Errors:0 Total Size:10,742,183,424 bytes (10GB) Total Sectors:20,980,827 Settings: size fat Write Block: 42 FastBloc LE																								
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-01 Source acquired using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AM-02 Source is type DS.</td> <td>as expected</td> </tr> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AM-05 An image is created on file system type FS.</td> <td>as expected</td> </tr> <tr> <td>AM-06 All visible sectors acquired.</td> <td>as expected</td> </tr> <tr> <td>AM-08 All sectors accurately acquired.</td> <td>as expected</td> </tr> <tr> <td>AO-01 Image file is complete and accurate.</td> <td>as expected</td> </tr> <tr> <td>AO-05 Multifile image created.</td> <td>as expected</td> </tr> <tr> <td>AO-22 Tool calculates hashes by block.</td> <td>option not available</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> <tr> <td>AO-24 Source is unchanged by acquisition.</td> <td>not checked</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-01 Source acquired using interface AI.	as expected	AM-02 Source is type DS.	as expected	AM-03 Execution environment is XE.	as expected	AM-05 An image is created on file system type FS.	as expected	AM-06 All visible sectors acquired.	as expected	AM-08 All sectors accurately acquired.	as expected	AO-01 Image file is complete and accurate.	as expected	AO-05 Multifile image created.	as expected	AO-22 Tool calculates hashes by block.	option not available	AO-23 Logged information is correct.	as expected	AO-24 Source is unchanged by acquisition.	not checked
Assertion & Expected Result	Actual Result																								
AM-01 Source acquired using interface AI.	as expected																								
AM-02 Source is type DS.	as expected																								
AM-03 Execution environment is XE.	as expected																								
AM-05 An image is created on file system type FS.	as expected																								
AM-06 All visible sectors acquired.	as expected																								
AM-08 All sectors accurately acquired.	as expected																								
AO-01 Image file is complete and accurate.	as expected																								
AO-05 Multifile image created.	as expected																								
AO-22 Tool calculates hashes by block.	option not available																								
AO-23 Logged information is correct.	as expected																								
AO-24 Source is unchanged by acquisition.	not checked																								
Analysis:	Expected results achieved																								

5.2.15 DA-07-NTFS

Test Case DA-07-NTFS EnCase 5.05f	
Case Summary:	DA-07 Acquire a digital source of type DS to an image file.
Assertions:	<p>AM-01 The tool uses access interface SRC-AI to access the digital source.</p> <p>AM-02 The tool acquires digital source DS.</p> <p>AM-03 The tool executes in execution environment XE.</p> <p>AM-05 If image file creation is specified, the tool creates an image file on file system type FS.</p> <p>AM-06 All visible sectors are acquired from the digital source.</p> <p>AM-08 All sectors acquired from the digital source are acquired accurately.</p> <p>AO-01 If the tool creates an image file, the data represented by the image file is the same as the data acquired by the tool.</p> <p>AO-05 If the tool creates a multi-file image of a requested size then all the individual files shall be no larger than the requested size.</p> <p>AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p> <p>AO-24 If the tool executes in a forensically safe execution environment, the digital source is unchanged by the acquisition process.</p>
Tester Name:	slm
Test Host:	joe
Test Date:	Tue Apr 10 10:23:53 2007
Drives:	src(01) dst (none) other (nfts)
Source Setup:	<pre>src hash (SHA1): < A48BB5665D6DC57C22DB68E2F723DA9AA8DF82B9 > src hash (MD5): < F458F673894753FA6A0EC8B8EC63848E > 78165360 total sectors (40020664320 bytes) Model (0BB-00JHC0) serial # (WD-WMAMC74171) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057175335 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 004208967 1023/001/01 1023/254/63 82 Linux swap 14 x 029431080 027744255 1023/000/01 1023/254/63 05 extended 15 S 000000063 027744192 1023/001/01 1023/254/63 07 NTFS 16 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 020980827 sectors 10742183424 bytes 3 000032067 sectors 16418304 bytes 5 002104452 sectors 1077479424 bytes 7 004192902 sectors 2146765824 bytes 9 008401932 sectors 4301789184 bytes 11 010490382 sectors 5371075584 bytes 13 004208967 sectors 2154991104 bytes 15 027744192 sectors 14205026304 bytes 01NTFS-md5 14205026303 92B27B30BEE8B0FFBA8C660FA1590D49 01NTFS-sha1 14205026303 0FBA4C36295CB9622CD815577429C3A588C34D09 01NTFS-sha256 14205026303 65FCD168163625E5EB74255B2A981B6F1C9D6259AF8A0851369101986A7ABC09</pre>
Log Highlights:	<pre>Start: 04/10/07 11:22:50AM Acquisition Hash: 494A6ED8A827AD9B5403E0CC89379956 Total Capacity:14,205,022,208 bytes (13.2GB) Total Clusters:3,468,023Unallocated:14,137,028,608 bytes (13.2GB) Actual Date:04/10/07 11:22:50AM</pre>

Test Case DA-07-NTFS EnCase 5.05f																									
	File Integrity:Completely Verified, 0 Errors Acquisition Hash:494a6ed8a827ad9b5403e0cc89379956 Verify Hash:494a6ed8a827ad9b5403e0cc89379956 EnCase Version:5.05f System Version:Windows XP Error Granularity:64 Read Errors:0 Missing Sector Errors:0 CRC Errors:0 Total Size:14,205,025,792 bytes (13.2GB) Total Sectors:27,744,191 Settings: fill none size cd Write Block: 44 FastBloc FE																								
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-01 Source acquired using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AM-02 Source is type DS.</td> <td>as expected</td> </tr> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AM-05 An image is created on file system type FS.</td> <td>as expected</td> </tr> <tr> <td>AM-06 All visible sectors acquired.</td> <td>one sector missed</td> </tr> <tr> <td>AM-08 All sectors accurately acquired.</td> <td>some sectors differ</td> </tr> <tr> <td>AO-01 Image file is complete and accurate.</td> <td>as expected</td> </tr> <tr> <td>AO-05 Multifile image created.</td> <td>as expected</td> </tr> <tr> <td>AO-22 Tool calculates hashes by block.</td> <td>option not available</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> <tr> <td>AO-24 Source is unchanged by acquisition.</td> <td>not checked</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-01 Source acquired using interface AI.	as expected	AM-02 Source is type DS.	as expected	AM-03 Execution environment is XE.	as expected	AM-05 An image is created on file system type FS.	as expected	AM-06 All visible sectors acquired.	one sector missed	AM-08 All sectors accurately acquired.	some sectors differ	AO-01 Image file is complete and accurate.	as expected	AO-05 Multifile image created.	as expected	AO-22 Tool calculates hashes by block.	option not available	AO-23 Logged information is correct.	as expected	AO-24 Source is unchanged by acquisition.	not checked
Assertion & Expected Result	Actual Result																								
AM-01 Source acquired using interface AI.	as expected																								
AM-02 Source is type DS.	as expected																								
AM-03 Execution environment is XE.	as expected																								
AM-05 An image is created on file system type FS.	as expected																								
AM-06 All visible sectors acquired.	one sector missed																								
AM-08 All sectors accurately acquired.	some sectors differ																								
AO-01 Image file is complete and accurate.	as expected																								
AO-05 Multifile image created.	as expected																								
AO-22 Tool calculates hashes by block.	option not available																								
AO-23 Logged information is correct.	as expected																								
AO-24 Source is unchanged by acquisition.	not checked																								
Analysis:	Expected results not achieved																								

5.2.16 DA-07-THUMB

Test Case DA-07-THUMB EnCase 5.05f													
Case Summary:	DA-07 Acquire a digital source of type DS to an image file.												
Assertions:	<p>AM-01 The tool uses access interface SRC-AI to access the digital source.</p> <p>AM-02 The tool acquires digital source DS.</p> <p>AM-03 The tool executes in execution environment XE.</p> <p>AM-05 If image file creation is specified, the tool creates an image file on file system type FS.</p> <p>AM-06 All visible sectors are acquired from the digital source.</p> <p>AM-08 All sectors acquired from the digital source are acquired accurately.</p> <p>AO-01 If the tool creates an image file, the data represented by the image file is the same as the data acquired by the tool.</p> <p>AO-05 If the tool creates a multi-file image of a requested size then all the individual files shall be no larger than the requested size.</p> <p>AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p> <p>AO-24 If the tool executes in a forensically safe execution environment, the digital source is unchanged by the acquisition process.</p>												
Tester Name:	slm												
Test Host:	joe												
Test Date:	Fri Apr 20 17:05:01 2007												
Drives:	src(d5-thumb) dst (none) other (fat32)												
Source Setup:	<pre>src hash (SHA1): < D68520EF74A336E49DCCF83815B7B08FDC53E38A > src hash (MD5): < C843593624B2B3B878596D8760B19954 > 505856 total sectors (258998272 bytes) Model (usb2.0Flash Disk) serial # () N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 778135908 1141509631 0357/116/40 0357/032/45 Boot 72 other 2 P 168689522 1936028240 0288/115/43 0367/114/50 Boot 65 other 3 P 1869881465 1936028192 0366/032/33 0357/032/43 Boot 79 other 4 P 2885681152 000055499 0372/097/50 0000/010/00 Boot 0D other 1 1141509631 sectors 584452931072 bytes 2 1936028240 sectors 991246458880 bytes 3 1936028192 sectors 991246434304 bytes 4 000055499 sectors 28415488 bytes</pre>												
Log Highlights:	<pre>Start: 04/20/07 05:54:50PM Acquisition Hash: C843593624B2B3B878596D8760B19954 Total Capacity:257,970,176 bytes (246MB) Total Clusters:125,962Unallocated:257,517,568 bytes (245.6MB) OEM Version:MSDOS5.0Serial Number:5C65-70D0 Actual Date:04/20/07 05:54:50PM File Integrity:Completely Verified, 0 Errors Acquisition Hash:c843593624b2b3b878596d8760b19954 Verify Hash:c843593624b2b3b878596d8760b19954 EnCase Version:5.05f System Version:Windows XP Error Granularity:64 Read Errors:0 Missing Sector Errors:0 CRC Errors:0 Total Size:258,998,272 bytes (247MB) Total Sectors:505,856 Settings: fill none Size CDWrite Block: 18 Tableau Forensic USB Bridge</pre>												
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-01 Source acquired using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AM-02 Source is type DS.</td> <td>as expected</td> </tr> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AM-05 An image is created on file system type FS.</td> <td>as expected</td> </tr> <tr> <td>AM-06 All visible sectors acquired.</td> <td>as expected</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-01 Source acquired using interface AI.	as expected	AM-02 Source is type DS.	as expected	AM-03 Execution environment is XE.	as expected	AM-05 An image is created on file system type FS.	as expected	AM-06 All visible sectors acquired.	as expected
Assertion & Expected Result	Actual Result												
AM-01 Source acquired using interface AI.	as expected												
AM-02 Source is type DS.	as expected												
AM-03 Execution environment is XE.	as expected												
AM-05 An image is created on file system type FS.	as expected												
AM-06 All visible sectors acquired.	as expected												

Test Case DA-07-THUMB EnCase 5.05f		
	AM-08 All sectors accurately acquired.	as expected
	AO-01 Image file is complete and accurate.	as expected
	AO-05 Multifile image created.	as expected
	AO-22 Tool calculates hashes by block.	option not available
	AO-23 Logged information is correct.	as expected
	AO-24 Source is unchanged by acquisition.	not checked
Analysis:	Expected results achieved	

5.2.17 DA-08-ATA28

Test Case DA-08-ATA28 EnCase 5.05f	
Case Summary:	DA-08 Acquire a physical drive with hidden sectors to an image file.
Assertions:	<p>AM-01 The tool uses access interface SRC-AI to access the digital source.</p> <p>AM-02 The tool acquires digital source DS.</p> <p>AM-03 The tool executes in execution environment XE.</p> <p>AM-05 If image file creation is specified, the tool creates an image file on file system type FS.</p> <p>AM-06 All visible sectors are acquired from the digital source.</p> <p>AM-07 All hidden sectors are acquired from the digital source.</p> <p>AM-08 All sectors acquired from the digital source are acquired accurately.</p> <p>AO-01 If the tool creates an image file, the data represented by the image file is the same as the data acquired by the tool.</p> <p>AO-05 If the tool creates a multi-file image of a requested size then all the individual files shall be no larger than the requested size.</p> <p>AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p> <p>AO-24 If the tool executes in a forensically safe execution environment, the digital source is unchanged by the acquisition process.</p>
Tester Name:	mrmw
Test Host:	Freddy
Test Date:	Fri Aug 31 15:15:21 2007
Drives:	src(42) dst (none) other (04-FU)
Source Setup:	<pre>src hash (SHA1): < 5A75399023056E0EB905082B35F8FAA1DB049229 > src hash (MD5): < F4B9AAB24554EEEB2A962BDA554A9252 > 78165360 total sectors (40020664320 bytes) 65534/015/63 (max cyl/hd values) 65535/016/63 (number of cyl/hd) IDE disk: Model (WDC WD400JB-00JJC0) serial # (WD-WCAMA3958512) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 070348572 0000/001/01 1023/254/63 Boot 07 NTFS 2 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 3 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 4 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 070348572 sectors 36018468864 bytes HPA created BIOS, XBIOS and Direct disk geometry Reporter (BXDR) BXDR 128 /S70000000 /P /fbxdrlog.txt Setting Maximum Addressable Sector to 70000000 MAS now set to 70000000 Hashes with HPA in place md5:9BF3C3DEADE47056A1DDC073C5F6B2E2 sha1:D76F909482B00767B62C295CADE202F92E61CD2E</pre>
Log Highlights:	<pre>Start: 08/31/07 04:42:49PM Acquisition Hash: F4B9AAB24554EEEB2A962BDA554A9252 Start: 08/31/07 05:05:29PM Actual Date:08/31/07 04:42:49PM File Integrity:Completely Verified, 0 Errors Acquisition Hash:f4b9aab24554eeeb2a962bda554a9252 Verify Hash:f4b9aab24554eeeb2a962bda554a9252 EnCase Version:5.05f System Version:Windows 2003 Server Error Granularity:64 Read Errors:0 Missing Sector Errors:0 CRC Errors:0 Total Size:40,020,664,320 bytes (37.3GB) Total Sectors:78,165,360 Rehash of Source SHA1: 5A75399023056E0EB905082B35F8FAA1DB049229 Settings: size CD (640 MB)</pre>

Test Case DA-08-ATA28 EnCase 5.05f																											
	fill none Write Block: Fastbloc SE																										
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-01 Source acquired using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AM-02 Source is type DS.</td> <td>as expected</td> </tr> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AM-05 An image is created on file system type FS.</td> <td>as expected</td> </tr> <tr> <td>AM-06 All visible sectors acquired.</td> <td>as expected</td> </tr> <tr> <td>AM-07 All hidden sectors acquired.</td> <td>as expected</td> </tr> <tr> <td>AM-08 All sectors accurately acquired.</td> <td>as expected</td> </tr> <tr> <td>AO-01 Image file is complete and accurate.</td> <td>as expected</td> </tr> <tr> <td>AO-05 Multifile image created.</td> <td>as expected</td> </tr> <tr> <td>AO-22 Tool calculates hashes by block.</td> <td>option not available</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> <tr> <td>AO-24 Source is unchanged by acquisition.</td> <td>as expected</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-01 Source acquired using interface AI.	as expected	AM-02 Source is type DS.	as expected	AM-03 Execution environment is XE.	as expected	AM-05 An image is created on file system type FS.	as expected	AM-06 All visible sectors acquired.	as expected	AM-07 All hidden sectors acquired.	as expected	AM-08 All sectors accurately acquired.	as expected	AO-01 Image file is complete and accurate.	as expected	AO-05 Multifile image created.	as expected	AO-22 Tool calculates hashes by block.	option not available	AO-23 Logged information is correct.	as expected	AO-24 Source is unchanged by acquisition.	as expected
Assertion & Expected Result	Actual Result																										
AM-01 Source acquired using interface AI.	as expected																										
AM-02 Source is type DS.	as expected																										
AM-03 Execution environment is XE.	as expected																										
AM-05 An image is created on file system type FS.	as expected																										
AM-06 All visible sectors acquired.	as expected																										
AM-07 All hidden sectors acquired.	as expected																										
AM-08 All sectors accurately acquired.	as expected																										
AO-01 Image file is complete and accurate.	as expected																										
AO-05 Multifile image created.	as expected																										
AO-22 Tool calculates hashes by block.	option not available																										
AO-23 Logged information is correct.	as expected																										
AO-24 Source is unchanged by acquisition.	as expected																										
Analysis:	Expected results achieved																										

5.2.18 DA-08-ATA48

Test Case DA-08-ATA48 EnCase 5.05f															
Case Summary:	DA-08 Acquire a physical drive with hidden sectors to an image file.														
Assertions:	<p>AM-01 The tool uses access interface SRC-AI to access the digital source.</p> <p>AM-02 The tool acquires digital source DS.</p> <p>AM-03 The tool executes in execution environment XE.</p> <p>AM-05 If image file creation is specified, the tool creates an image file on file system type FS.</p> <p>AM-06 All visible sectors are acquired from the digital source.</p> <p>AM-07 All hidden sectors are acquired from the digital source.</p> <p>AM-08 All sectors acquired from the digital source are acquired accurately.</p> <p>AO-01 If the tool creates an image file, the data represented by the image file is the same as the data acquired by the tool.</p> <p>AO-05 If the tool creates a multi-file image of a requested size then all the individual files shall be no larger than the requested size.</p> <p>AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p> <p>AO-24 If the tool executes in a forensically safe execution environment, the digital source is unchanged by the acquisition process.</p>														
Tester Name:	mrmw														
Test Host:	Freddy														
Test Date:	Fri Aug 31 13:52:37 2007														
Drives:	src(4B) dst (none) other (01-FU)														
Source Setup:	<pre>src hash (SHA1): < F409920836FED76DBB60DEEEF467A6DDED5BF48E > src hash (MD5): < B5641B5A594912B4D60518304B1DE698 > 390721968 total sectors (200049647616 bytes) 24320/254/63 (max cyl/hd values) 24321/255/63 (number of cyl/hd) IDE disk: Model (WDC WD2000JB-00GVC0) serial # (WD-WCAL78252964) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 351646722 0000/001/01 1023/254/63 Boot 07 NTFS 2 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 3 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 4 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 351646722 sectors 180043121664 bytes HPA created BIOS, XBIOS and Direct disk geometry Reporter (BXDR) BXDR 128 /S351000000 /P /fHPA.TXT Setting Maximum Addressable Sector to 351000000 MAS now set to 351000000 Hashes with HPA in place md5:6BAFEFC000470C126434D933429C879B sha1:2D50DBD82CD3DA90A6E5BF13B2B40808C40998A1</pre>														
Log Highlights:	<pre>Start: 08/31/07 02:36:22PM Acquisition Hash: B5641B5A594912B4D60518304B1DE698 Total Capacity:180,043,120,640 bytes (167.7GB) Total Clusters:43,955,840Unallocated:177,459,097,600 bytes (165.3GB) Rehash of Source SHA1: F409920836FED76DBB60DEEEF467A6DDED5BF48E Settings: size CD (640 MB) fill none Write Block: FastBloc SE</pre>														
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-01 Source acquired using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AM-02 Source is type DS.</td> <td>as expected</td> </tr> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AM-05 An image is created on file system type FS.</td> <td>as expected</td> </tr> <tr> <td>AM-06 All visible sectors acquired.</td> <td>as expected</td> </tr> <tr> <td>AM-07 All hidden sectors acquired.</td> <td>as expected</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-01 Source acquired using interface AI.	as expected	AM-02 Source is type DS.	as expected	AM-03 Execution environment is XE.	as expected	AM-05 An image is created on file system type FS.	as expected	AM-06 All visible sectors acquired.	as expected	AM-07 All hidden sectors acquired.	as expected
Assertion & Expected Result	Actual Result														
AM-01 Source acquired using interface AI.	as expected														
AM-02 Source is type DS.	as expected														
AM-03 Execution environment is XE.	as expected														
AM-05 An image is created on file system type FS.	as expected														
AM-06 All visible sectors acquired.	as expected														
AM-07 All hidden sectors acquired.	as expected														

Test Case DA-08-ATA48 EnCase 5.05f		
	AM-08 All sectors accurately acquired.	as expected
	AO-01 Image file is complete and accurate.	as expected
	AO-05 Multifile image created.	as expected
	AO-22 Tool calculates hashes by block.	option not available
	AO-23 Logged information is correct.	as expected
	AO-24 Source is unchanged by acquisition.	as expected
Analysis:	Expected results achieved	

5.2.19 DA-08-DCO

Test Case DA-08-DCO EnCase 5.05f	
Case Summary:	DA-08 Acquire a physical drive with hidden sectors to an image file.
Assertions:	<p>AM-01 The tool uses access interface SRC-AI to access the digital source.</p> <p>AM-02 The tool acquires digital source DS.</p> <p>AM-03 The tool executes in execution environment XE.</p> <p>AM-05 If image file creation is specified, the tool creates an image file on file system type FS.</p> <p>AM-06 All visible sectors are acquired from the digital source.</p> <p>AM-07 All hidden sectors are acquired from the digital source.</p> <p>AM-08 All sectors acquired from the digital source are acquired accurately.</p> <p>AO-01 If the tool creates an image file, the data represented by the image file is the same as the data acquired by the tool.</p> <p>AO-05 If the tool creates a multi-file image of a requested size then all the individual files shall be no larger than the requested size.</p> <p>AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p> <p>AO-24 If the tool executes in a forensically safe execution environment, the digital source is unchanged by the acquisition process.</p>
Tester Name:	mrmw 92
Test Host:	Frank
Test Date:	Fri Aug 31 16:29:51 2007
Drives:	src(92) dst (none) other (04-FU)
Source Setup:	<pre>src hash (SHAL): < 63E6F7BD3040A8ADA2CF8FBF66A805B76DF10481 > src hash (MD5): < E095DD1BD0B0DD6E603153A3FE1A2F3E > 58633344 total sectors (30020272128 bytes) 58167/015/63 (max cyl/hd values) 58168/016/63 (number of cyl/hd) IDE disk: Model (WDC WD300BB-00CAA0) serial # (WD-WMA8H2140350) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 058605057 0000/001/01 1023/254/63 Boot 07 NTFS 2 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 3 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 4 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 058605057 sectors 30005789184 bytes Hashes with DCO in place: md5:525963C6789423396FE1F3202A8CBD04 shal.txt:55A3CFE756B7B0034DCCE71F7D7A477D8681B781</pre>
Log Highlights:	<pre>Comparision of original to clone Drive Sectors compared: 58633344 Sectors match: 58633344 Sectors differ: 0 Bytes differ: 0 Diffs range 0 source read errors, 0 destination read errors Actual Date:08/31/07 05:55:36PM File Integrity:Completely Verified, 0 Errors Acquisition Hash:e095dd1bd0b0dd6e603153a3fela2f3e Verify Hash:e095dd1bd0b0dd6e603153a3fela2f3e EnCase Version:5.05f System Version:Windows 2003 Server Error Granularity:64 Read Errors:0 Missing Sector Errors:0 CRC Errors:0 Total Size:30,020,272,128 bytes (28GB) Total Sectors:58,633,344 Rehash of Source SHAL: 63E6F7BD3040A8ADA2CF8FBF66A805B76DF10481 Settings: size CD (640 MB)</pre>

Test Case DA-08-DCO EnCase 5.05f																											
	fill none Write Block: Fastbloc SE																										
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-01 Source acquired using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AM-02 Source is type DS.</td> <td>as expected</td> </tr> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AM-05 An image is created on file system type FS.</td> <td>as expected</td> </tr> <tr> <td>AM-06 All visible sectors acquired.</td> <td>as expected</td> </tr> <tr> <td>AM-07 All hidden sectors acquired.</td> <td>as expected</td> </tr> <tr> <td>AM-08 All sectors accurately acquired.</td> <td>as expected</td> </tr> <tr> <td>AO-01 Image file is complete and accurate.</td> <td>as expected</td> </tr> <tr> <td>AO-05 Multifile image created.</td> <td>as expected</td> </tr> <tr> <td>AO-22 Tool calculates hashes by block.</td> <td>option not available</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> <tr> <td>AO-24 Source is unchanged by acquisition.</td> <td>as expected</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-01 Source acquired using interface AI.	as expected	AM-02 Source is type DS.	as expected	AM-03 Execution environment is XE.	as expected	AM-05 An image is created on file system type FS.	as expected	AM-06 All visible sectors acquired.	as expected	AM-07 All hidden sectors acquired.	as expected	AM-08 All sectors accurately acquired.	as expected	AO-01 Image file is complete and accurate.	as expected	AO-05 Multifile image created.	as expected	AO-22 Tool calculates hashes by block.	option not available	AO-23 Logged information is correct.	as expected	AO-24 Source is unchanged by acquisition.	as expected
Assertion & Expected Result	Actual Result																										
AM-01 Source acquired using interface AI.	as expected																										
AM-02 Source is type DS.	as expected																										
AM-03 Execution environment is XE.	as expected																										
AM-05 An image is created on file system type FS.	as expected																										
AM-06 All visible sectors acquired.	as expected																										
AM-07 All hidden sectors acquired.	as expected																										
AM-08 All sectors accurately acquired.	as expected																										
AO-01 Image file is complete and accurate.	as expected																										
AO-05 Multifile image created.	as expected																										
AO-22 Tool calculates hashes by block.	option not available																										
AO-23 Logged information is correct.	as expected																										
AO-24 Source is unchanged by acquisition.	as expected																										
Analysis:	Expected results achieved																										

5.2.20 DA-09-01

Test Case DA-09-01 EnCase 5.05f	
Case Summary:	DA-09 Acquire a digital source that has at least one faulty data sector.
Assertions:	<p>AM-01 The tool uses access interface SRC-AI to access the digital source.</p> <p>AM-02 The tool acquires digital source DS.</p> <p>AM-03 The tool executes in execution environment XE.</p> <p>AM-05 If image file creation is specified, the tool creates an image file on file system type FS.</p> <p>AM-06 All visible sectors are acquired from the digital source.</p> <p>AM-08 All sectors acquired from the digital source are acquired accurately.</p> <p>AM-09 If unresolved errors occur while reading from the selected digital source, the tool notifies the user of the error type and location within the digital source.</p> <p>AM-10 If unresolved errors occur while reading from the selected digital source, the tool uses a benign fill in the destination object in place of the inaccessible data.</p> <p>AO-01 If the tool creates an image file, the data represented by the image file is the same as the data acquired by the tool.</p> <p>AO-05 If the tool creates a multi-file image of a requested size then all the individual files shall be no larger than the requested size.</p> <p>AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p> <p>AO-24 If the tool executes in a forensically safe execution environment, the digital source is unchanged by the acquisition process.</p>
Tester Name:	mrmw
Test Host:	Joe
Test Date:	Thu May 17 10:32:17 2007
Drives:	src(CPR1) dst (28-IDE) other (02-FU)
Source Setup:	<p>No before hash for CPR1 120103200 total sectors (61492838400 bytes)</p> <p>Drive with known bad sectors</p> <p>Vendor: Maxtor Model: DiamondMax Plus 9</p> <p>Known Bad Sector List for ED-CPR-BAD-1</p> <p>Manufacturer: Maxtor</p> <p>Model: 6Y060L0 DiamondMax Plus 9</p> <p>Serial Number: Y27KR6CE</p> <p>Capacity: 60GB</p> <p>Interface: PATA</p> <p>54 faulty sectors</p> <p>10069095, 10069911, 12023808, 18652594, 18656041, 18656857, 18660303, 18661119, 19746716-19746717, 22233904, 23098370, 23383001, 24102466-24102467, 24104250, 24106656, 24107458, 28959971-28959972, 41825791, 41828995, 52654580, 52655318, 60522984, 68643842-68643843, 69973290, 72714626, 72715293, 82148809, 82148810, 83810525, 85310861, 85313430, 85314038-85314039, 86321211, 86323780, 87186066, 87856313, 87856922, 97191260-97191261, 100093150-100093151, 103861021, 109706975-109706976, 110347947, 110350122-110350123, 115664758, 115835518</p>
Log Highlights:	<p>Destination setup</p> <p>488397168 sectors wiped with 28</p> <p>Comparison of original to clone Drive</p> <p>Sectors compared: 120103200</p> <p>Sectors match: 120103146</p> <p>Sectors differ: 54</p> <p>Bytes differ: 27594</p> <p>Diffs range 10069095, 10069911, 12023808, 18652594, 18656041, 18656857, 18660303, 18661119, 19746716-19746717, 22233904, 23098370, 23383001, 24102466-24102467, 24104250, 24106656, 24107458, 28959971-28959972, 41825791, 41828995, 52654580, 52655318, 60522984, 68643842-68643843, 69973290,</p>

Test Case DA-09-01 EnCase 5.05f

72714626, 72715293, 82148809-82148810, 83810525, 85310861,
85313430, 85314038-85314039, 86321211, 86323780, 87186066,
87856313, 87856922, 97191260-97191261, 100093150-100093151,
103861021, 109706975-109706976, 110347947, 110350122-110350123,
115664758, 115835518
Source (120103200) has 368293968 fewer sectors than destination (488397168)
Zero fill: 0
Src Byte fill (ED): 0
Dst Byte fill (28): 368293968
Other fill: 0
Other no fill: 0
Zero fill range:
Src fill range:
Dst fill range: 120103200-488397167
Other fill range:
Other not filled range:
0 source read errors, 0 destination read errors

Start: 05/17/07 11:47:54AM
Acquisition Hash: EF3E63C324522760C838F2A93B7180D3
Actual Date: 05/17/07 11:47:54AM
EnCase Version: 5.05f
System Version: Windows XP
Error Granularity: 1
Read Errors: 44
Missing Sector Errors: 0
CRC Errors: 0
Total Size: 61,492,838,400 bytes (57.3GB)
Total Sectors: 120,103,200
Read Errors: 44
Missing Sector Errors: 0
CRC Errors: 0
Compression: Good
Read Errors

Start Sector Sectors
10,069,911 1
12,023,808 1
18,652,594 1
18,656,041 1
18,656,857 1
18,660,303 1
18,661,119 1
19,746,716 2
22,233,904 1
23,098,370 1
23,383,001 1
24,102,466 2
24,104,250 1
24,106,656 1
24,107,458 1
28,959,971 2
41,825,791 1
41,828,995 1
52,654,580 1
52,655,318 1
60,522,984 1
68,643,842 2
69,973,290 1
72,714,626 1
72,715,293 1
82,148,809 2
83,810,525 1
85,310,861 1
85,313,430 1
85,314,038 2
86,321,211 1
86,323,780 1
87,186,066 1

Test Case DA-09-01 EnCase 5.05f																													
	<pre> 87,856,313 1 87,856,922 1 97,191,260 2 100,093,150 2 103,861,021 1 109,706,975 2 110,347,947 1 110,350,122 2 115,664,758 1 115,835,518 1 Total Size: 61,492,838,400 bytes (57.3GB) Total Sectors: 120,103,200 Cannot read the partition table 2 different run lengths observed in 44 runs 34 runs of length 1 10 runs of length 2 54 sectors differ 54 zero filled and 0 varying non-zero filled Settings: fill none size cd Write Block: fastbloc FE 9 </pre>																												
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-01 Source acquired using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AM-02 Source is type DS.</td> <td>as expected</td> </tr> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AM-05 An image is created on file system type FS.</td> <td>as expected</td> </tr> <tr> <td>AM-06 All visible sectors acquired.</td> <td>as expected</td> </tr> <tr> <td>AM-08 All sectors accurately acquired.</td> <td>as expected</td> </tr> <tr> <td>AM-09 Error logged.</td> <td>as expected</td> </tr> <tr> <td>AM-10 Benign fill replaces inaccessible sectors.</td> <td>as expected</td> </tr> <tr> <td>AO-01 Image file is complete and accurate.</td> <td>as expected</td> </tr> <tr> <td>AO-05 Multifile image created.</td> <td>as expected</td> </tr> <tr> <td>AO-22 Tool calculates hashes by block.</td> <td>option not available</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> <tr> <td>AO-24 Source is unchanged by acquisition.</td> <td>not checked</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-01 Source acquired using interface AI.	as expected	AM-02 Source is type DS.	as expected	AM-03 Execution environment is XE.	as expected	AM-05 An image is created on file system type FS.	as expected	AM-06 All visible sectors acquired.	as expected	AM-08 All sectors accurately acquired.	as expected	AM-09 Error logged.	as expected	AM-10 Benign fill replaces inaccessible sectors.	as expected	AO-01 Image file is complete and accurate.	as expected	AO-05 Multifile image created.	as expected	AO-22 Tool calculates hashes by block.	option not available	AO-23 Logged information is correct.	as expected	AO-24 Source is unchanged by acquisition.	not checked
Assertion & Expected Result	Actual Result																												
AM-01 Source acquired using interface AI.	as expected																												
AM-02 Source is type DS.	as expected																												
AM-03 Execution environment is XE.	as expected																												
AM-05 An image is created on file system type FS.	as expected																												
AM-06 All visible sectors acquired.	as expected																												
AM-08 All sectors accurately acquired.	as expected																												
AM-09 Error logged.	as expected																												
AM-10 Benign fill replaces inaccessible sectors.	as expected																												
AO-01 Image file is complete and accurate.	as expected																												
AO-05 Multifile image created.	as expected																												
AO-22 Tool calculates hashes by block.	option not available																												
AO-23 Logged information is correct.	as expected																												
AO-24 Source is unchanged by acquisition.	not checked																												
Analysis:	Expected results achieved																												

5.2.21 DA-09-02

Test Case DA-09-02 EnCase 5.05f	
Case Summary:	DA-09 Acquire a digital source that has at least one faulty data sector.
Assertions:	<p>AM-01 The tool uses access interface SRC-AI to access the digital source.</p> <p>AM-02 The tool acquires digital source DS.</p> <p>AM-03 The tool executes in execution environment XE.</p> <p>AM-05 If image file creation is specified, the tool creates an image file on file system type FS.</p> <p>AM-06 All visible sectors are acquired from the digital source.</p> <p>AM-08 All sectors acquired from the digital source are acquired accurately.</p> <p>AM-09 If unresolved errors occur while reading from the selected digital source, the tool notifies the user of the error type and location within the digital source.</p> <p>AM-10 If unresolved errors occur while reading from the selected digital source, the tool uses a benign fill in the destination object in place of the inaccessible data.</p> <p>AO-01 If the tool creates an image file, the data represented by the image file is the same as the data acquired by the tool.</p> <p>AO-05 If the tool creates a multi-file image of a requested size then all the individual files shall be no larger than the requested size.</p> <p>AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p> <p>AO-24 If the tool executes in a forensically safe execution environment, the digital source is unchanged by the acquisition process.</p>
Tester Name:	mrmw
Test Host:	Joe
Test Date:	Fri May 18 10:22:33 2007
Drives:	src(CPR1) dst (21) other (01-fu)
Source Setup:	<p>No before hash for CPR1 120103200 total sectors (61492838400 bytes)</p> <p>Drive with known bad sectors</p> <p>Vendor: Maxtor Model: DiamondMax Plus 9</p> <p>Known Bad Sector List for ED-CPR-BAD-1</p> <p>Manufacturer: Maxtor</p> <p>Model: 6Y060L0 DiamondMax Plus 9</p> <p>Serial Number: Y27KR6CE</p> <p>Capacity: 60GB</p> <p>Interface: PATA</p> <p>54 faulty sectors</p> <p>10069095, 10069911, 12023808, 18652594, 18656041, 18656857, 18660303, 18661119, 19746716-19746717, 22233904, 23098370, 23383001, 24102466-24102467, 24104250, 24106656, 24107458, 28959971-28959972, 41825791, 41828995, 52654580, 52655318, 60522984, 68643842-68643843, 69973290, 72714626, 72715293, 82148809, 82148810, 83810525, 85310861, 85313430, 85314038-85314039, 86321211, 86323780, 87186066, 87856313, 87856922, 97191260-97191261, 100093150-100093151, 103861021, 109706975-109706976, 110347947, 110350122-110350123, 115664758, 115835518</p>
Log Highlights:	<p>Destination setup</p> <p>312581808 sectors wiped with 52</p> <p>Comparison of original to clone Drive</p> <p>Sectors compared: 120103200</p> <p>Sectors match: 120103106</p> <p>Sectors differ: 94</p> <p>Bytes differ: 48034</p> <p>Diffs range 10069094-10069095, 10069910-10069911, 12023808-12023809, 18652594-18652595, 18656040-18656041, 18656856-18656857, 18660302-18660303, 18661118-18661119, 19746716-19746717, 22233904-22233905, 23098370-23098371, 23383000-23383001, 24102466-24102467, 24104250-24104251, 24106656-24106657,</p>

Test Case DA-09-02 EnCase 5.05f

24107458-24107459, 28959970-28959973, 41825790-41825791,
41828994-41828995, 52654580-52654581, 52655318-52655319,
60522984-60522985, 68643842-68643843, 69973290-69973291,
72714626-72714627, 72715292-72715293, 82148808-82148811,
83810524-83810525, 85310860-85310861, 85313430-85313431,
85314038-85314039, 86321210-86321211, 86323780-86323781,
87186066-87186067, 87856312-87856313, 87856922-87856923,
97191260-97191261, 100093150-100093151, 103861020-103861021,
109706974-109706977, 110347946-110347947, 110350122-110350123,
115664758-115664759, 115835518-115835519
Source (120103200) has 75709872 fewer sectors than destination (195813072)
Zero fill: 0
Src Byte fill (ED): 0
Dst Byte fill (21): 75709872
Other fill: 0
Other no fill: 0
Zero fill range:
Src fill range:
Dst fill range: 120103200-195813071
Other fill range:
Other not filled range:
0 source read errors, 0 destination read errors

Actual Date:05/18/07 03:01:15PM
File Integrity:Completely Verified, 0 Errors
Acquisition Hash:f6d2f0da8220ec8e147e5c9345836f95
Verify Hash:f6d2f0da8220ec8e147e5c9345836f95
EnCase Version:5.05f
System Version:Windows 2000
Error Granularity:2
Read Errors:44
Missing Sector Errors:0
CRC Errors:0
Total Size:61,492,838,400 bytes (57.3GB)
Total Sectors:120,103,200
Read Errors: 44
Missing Sector Errors: 0
CRC Errors: 0
Compression: Good
Read Errors
Start Sector Sectors
10,069,094 2
10,069,910 2
12,023,808 2
18,652,594 2
18,656,040 2
18,656,856 2
18,660,302 2
18,661,118 2
19,746,716 2
22,233,904 2
23,098,370 2
23,383,000 2
24,102,466 2
24,104,250 2
24,106,656 2
24,107,458 2
28,959,970 4
41,825,790 2
41,828,994 2
52,654,580 2
52,655,318 2
60,522,984 2
68,643,842 2
69,973,290 2
72,714,626 2
72,715,292 2
82,148,808 4
83,810,524 2
85,310,860 2

Test Case DA-09-02 EnCase 5.05f																													
	<p>85,313,430 2 85,314,038 2 86,321,210 2 86,323,780 2 87,186,066 2 87,856,312 2 87,856,922 2 97,191,260 2 100,093,150 2 103,861,020 2 109,706,974 4 110,347,946 2 110,350,122 2 115,664,758 2 115,835,518 2</p> <p>2 different run lengths observed in 44 runs 41 runs of length 2 3 runs of length 4 94 sectors differ 94 zero filled and 0 varying non-zero filled Settings: fill none size cd Write Block: none</p>																												
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-01 Source acquired using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AM-02 Source is type DS.</td> <td>as expected</td> </tr> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AM-05 An image is created on file system type FS.</td> <td>as expected</td> </tr> <tr> <td>AM-06 All visible sectors acquired.</td> <td>as expected</td> </tr> <tr> <td>AM-08 All sectors accurately acquired.</td> <td>some sectors differ</td> </tr> <tr> <td>AM-09 Error logged.</td> <td>as expected</td> </tr> <tr> <td>AM-10 Benign fill replaces inaccessible sectors.</td> <td>as expected</td> </tr> <tr> <td>AO-01 Image file is complete and accurate.</td> <td>as expected</td> </tr> <tr> <td>AO-05 Multifile image created.</td> <td>as expected</td> </tr> <tr> <td>AO-22 Tool calculates hashes by block.</td> <td>option not available</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> <tr> <td>AO-24 Source is unchanged by acquisition.</td> <td>not checked</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-01 Source acquired using interface AI.	as expected	AM-02 Source is type DS.	as expected	AM-03 Execution environment is XE.	as expected	AM-05 An image is created on file system type FS.	as expected	AM-06 All visible sectors acquired.	as expected	AM-08 All sectors accurately acquired.	some sectors differ	AM-09 Error logged.	as expected	AM-10 Benign fill replaces inaccessible sectors.	as expected	AO-01 Image file is complete and accurate.	as expected	AO-05 Multifile image created.	as expected	AO-22 Tool calculates hashes by block.	option not available	AO-23 Logged information is correct.	as expected	AO-24 Source is unchanged by acquisition.	not checked
Assertion & Expected Result	Actual Result																												
AM-01 Source acquired using interface AI.	as expected																												
AM-02 Source is type DS.	as expected																												
AM-03 Execution environment is XE.	as expected																												
AM-05 An image is created on file system type FS.	as expected																												
AM-06 All visible sectors acquired.	as expected																												
AM-08 All sectors accurately acquired.	some sectors differ																												
AM-09 Error logged.	as expected																												
AM-10 Benign fill replaces inaccessible sectors.	as expected																												
AO-01 Image file is complete and accurate.	as expected																												
AO-05 Multifile image created.	as expected																												
AO-22 Tool calculates hashes by block.	option not available																												
AO-23 Logged information is correct.	as expected																												
AO-24 Source is unchanged by acquisition.	not checked																												
Analysis:	Expected results not achieved																												

5.2.22 DA-09-16

Test Case DA-09-16 EnCase 5.05f	
Case Summary:	DA-09 Acquire a digital source that has at least one faulty data sector.
Assertions:	<p>AM-01 The tool uses access interface SRC-AI to access the digital source.</p> <p>AM-02 The tool acquires digital source DS.</p> <p>AM-03 The tool executes in execution environment XE.</p> <p>AM-05 If image file creation is specified, the tool creates an image file on file system type FS.</p> <p>AM-06 All visible sectors are acquired from the digital source.</p> <p>AM-08 All sectors acquired from the digital source are acquired accurately.</p> <p>AM-09 If unresolved errors occur while reading from the selected digital source, the tool notifies the user of the error type and location within the digital source.</p> <p>AM-10 If unresolved errors occur while reading from the selected digital source, the tool uses a benign fill in the destination object in place of the inaccessible data.</p> <p>AO-01 If the tool creates an image file, the data represented by the image file is the same as the data acquired by the tool.</p> <p>AO-05 If the tool creates a multi-file image of a requested size then all the individual files shall be no larger than the requested size.</p> <p>AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p> <p>AO-24 If the tool executes in a forensically safe execution environment, the digital source is unchanged by the acquisition process.</p>
Tester Name:	mrmw
Test Host:	Joe
Test Date:	Fri May 18 09:11:03 2007
Drives:	src(CPR1) dst (52) other (02-fu)
Source Setup:	<p>No before hash for CPR1 120103200 total sectors (61492838400 bytes)</p> <p>Drive with known bad sectors</p> <p>Vendor: Maxtor Model: DiamondMax Plus 9</p> <p>Known Bad Sector List for ED-CPR-BAD-1</p> <p>Manufacturer: Maxtor</p> <p>Model: 6Y060L0 DiamondMax Plus 9</p> <p>Serial Number: Y27KR6CE</p> <p>Capacity: 60GB</p> <p>Interface: PATA</p> <p>54 faulty sectors</p> <p>10069095, 10069911, 12023808, 18652594, 18656041, 18656857, 18660303, 18661119, 19746716-19746717, 22233904, 23098370, 23383001, 24102466-24102467, 24104250, 24106656, 24107458, 28959971-28959972, 41825791, 41828995, 52654580, 52655318, 60522984, 68643842-68643843, 69973290, 72714626, 72715293, 82148809, 82148810, 83810525, 85310861, 85313430, 85314038-85314039, 86321211, 86323780, 87186066, 87856313, 87856922, 97191260-97191261, 100093150-100093151, 103861021, 109706975-109706976, 110347947, 110350122-110350123, 115664758, 115835518</p>
Log Highlights:	<p>Destination setup</p> <p>312581808 sectors wiped with 52</p> <p>Comparison of original to clone Drive</p> <p>Sectors compared: 120103200</p> <p>Sectors match: 120102480</p> <p>Sectors differ: 720</p> <p>Bytes differ: 367920</p> <p>Diffs range 10069088-10069103, 10069904-10069919, 12023808-12023823, 18652592-18652607, 18656032-18656047, 18656848-18656863, 18660288-18660303, 18661104-18661119, 19746704-19746719, 22233904-22233919, 23098368-23098383, 23382992-23383007, 24102464-24102479, 24104240-24104255, 24106656-24106671,</p>

Test Case DA-09-16 EnCase 5.05f

24107456-24107471, 28959968-28959983, 41825776-41825791,
41828992-41829007, 52654576-52654591, 52655312-52655327,
60522976-60522991, 68643840-68643855, 69973280-69973295,
72714624-72714639, 72715280-72715295, 82148800-82148815,
83810512-83810527, 85310848-85310863, 85313424-85313439,
85314032-85314047, 86321200-86321215, 86323776-86323791,
87186064-87186079, 87856304-87856319, 87856912-87856927,
97191248-97191263, 100093136-100093151, 103861008-103861023,
109706960-109706991, 110347936-110347951, 110350112-110350127,
115664752-115664767, 115835504-115835519
Source (120103200) has 192478608 fewer sectors than destination (312581808)
Zero fill: 0
Src Byte fill (ED): 0
Dst Byte fill (52): 192478608
Other fill: 0
Other no fill: 0
Zero fill range:
Src fill range:
Dst fill range: 120103200-312581807
Other fill range:
Other not filled range:
0 source read errors, 0 destination read errors

Start: 05/18/07 10:29:11AM
Acquisition Hash: 474E17967F4D9CCC5A643A21F4907F17
Actual Date:05/18/07 10:29:11AM
File Integrity:Completely Verified, 0 Errors
Acquisition Hash:474e17967f4d9ccc5a643a21f4907f17
Verify Hash:474e17967f4d9ccc5a643a21f4907f17
EnCase Version:5.05f
System Version:Windows 2003 Server
Error Granularity:16
Read Errors:44
Missing Sector Errors:0
CRC Errors:0
Total Size:61,492,838,400 bytes (57.3GB)
Total Sectors:120,103,200
Read Errors: 44
Missing Sector Errors: 0
CRC Errors: 0
Compression: Good
Read Errors
Start Sector Sectors
10,069,088 16
10,069,904 16
12,023,808 16
18,652,592 16
18,656,032 16
18,656,848 16
18,660,288 16
18,661,104 16
19,746,704 16
22,233,904 16
23,098,368 16
23,382,992 16
24,102,464 16
24,104,240 16
24,106,656 16
24,107,456 16
28,959,968 16
41,825,776 16
41,828,992 16
52,654,576 16
52,655,312 16
60,522,976 16
68,643,840 16
69,973,280 16
72,714,624 16
72,715,280 16
82,148,800 16

Test Case DA-09-16 EnCase 5.05f																													
	<p>83,810,512 16 85,310,848 16 85,313,424 16 85,314,032 16 86,321,200 16 86,323,776 16 87,186,064 16 87,856,304 16 87,856,912 16 97,191,248 16 100,093,136 16 103,861,008 16 109,706,960 32 110,347,936 16 110,350,112 16 115,664,752 16 115,835,504 16</p> <p>2 different run lengths observed in 44 runs 43 runs of length 16 1 runs of length 32 720 sectors differ 720 zero filled and 0 varying non-zero filled Settings: fill none size cd Write Block: 37 WiebeTech ComboDock</p>																												
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-01 Source acquired using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AM-02 Source is type DS.</td> <td>as expected</td> </tr> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AM-05 An image is created on file system type FS.</td> <td>as expected</td> </tr> <tr> <td>AM-06 All visible sectors acquired.</td> <td>as expected</td> </tr> <tr> <td>AM-08 All sectors accurately acquired.</td> <td>some sectors differ</td> </tr> <tr> <td>AM-09 Error logged.</td> <td>as expected</td> </tr> <tr> <td>AM-10 Benign fill replaces inaccessible sectors.</td> <td>as expected</td> </tr> <tr> <td>AO-01 Image file is complete and accurate.</td> <td>as expected</td> </tr> <tr> <td>AO-05 Multifile image created.</td> <td>as expected</td> </tr> <tr> <td>AO-22 Tool calculates hashes by block.</td> <td>option not available</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> <tr> <td>AO-24 Source is unchanged by acquisition.</td> <td>not checked</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-01 Source acquired using interface AI.	as expected	AM-02 Source is type DS.	as expected	AM-03 Execution environment is XE.	as expected	AM-05 An image is created on file system type FS.	as expected	AM-06 All visible sectors acquired.	as expected	AM-08 All sectors accurately acquired.	some sectors differ	AM-09 Error logged.	as expected	AM-10 Benign fill replaces inaccessible sectors.	as expected	AO-01 Image file is complete and accurate.	as expected	AO-05 Multifile image created.	as expected	AO-22 Tool calculates hashes by block.	option not available	AO-23 Logged information is correct.	as expected	AO-24 Source is unchanged by acquisition.	not checked
Assertion & Expected Result	Actual Result																												
AM-01 Source acquired using interface AI.	as expected																												
AM-02 Source is type DS.	as expected																												
AM-03 Execution environment is XE.	as expected																												
AM-05 An image is created on file system type FS.	as expected																												
AM-06 All visible sectors acquired.	as expected																												
AM-08 All sectors accurately acquired.	some sectors differ																												
AM-09 Error logged.	as expected																												
AM-10 Benign fill replaces inaccessible sectors.	as expected																												
AO-01 Image file is complete and accurate.	as expected																												
AO-05 Multifile image created.	as expected																												
AO-22 Tool calculates hashes by block.	option not available																												
AO-23 Logged information is correct.	as expected																												
AO-24 Source is unchanged by acquisition.	not checked																												
Analysis:	Expected results not achieved																												

5.2.23 DA-09-64

Test Case DA-09-64 EnCase 5.05f	
Case Summary:	DA-09 Acquire a digital source that has at least one faulty data sector.
Assertions:	<p>AM-01 The tool uses access interface SRC-AI to access the digital source.</p> <p>AM-02 The tool acquires digital source DS.</p> <p>AM-03 The tool executes in execution environment XE.</p> <p>AM-05 If image file creation is specified, the tool creates an image file on file system type FS.</p> <p>AM-06 All visible sectors are acquired from the digital source.</p> <p>AM-08 All sectors acquired from the digital source are acquired accurately.</p> <p>AM-09 If unresolved errors occur while reading from the selected digital source, the tool notifies the user of the error type and location within the digital source.</p> <p>AM-10 If unresolved errors occur while reading from the selected digital source, the tool uses a benign fill in the destination object in place of the inaccessible data.</p> <p>AO-01 If the tool creates an image file, the data represented by the image file is the same as the data acquired by the tool.</p> <p>AO-05 If the tool creates a multi-file image of a requested size then all the individual files shall be no larger than the requested size.</p> <p>AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p> <p>AO-24 If the tool executes in a forensically safe execution environment, the digital source is unchanged by the acquisition process.</p>
Tester Name:	mrmw
Test Host:	Frank
Test Date:	Mon May 21 12:12:37 2007
Drives:	src(CPR1) dst (21) other (01-fu)
Source Setup:	<p>No before hash for CPR1 120103200 total sectors (61492838400 bytes)</p> <p>Drive with known bad sectors</p> <p>Vendor: Maxtor Model: DiamondMax Plus 9</p> <p>Known Bad Sector List for ED-CPR-BAD-1</p> <p>Manufacturer: Maxtor</p> <p>Model: 6Y060L0 DiamondMax Plus 9</p> <p>Serial Number: Y27KR6CE</p> <p>Capacity: 60GB</p> <p>Interface: PATA</p> <p>54 faulty sectors</p> <p>10069095, 10069911, 12023808, 18652594, 18656041, 18656857, 18660303, 18661119, 19746716-19746717, 22233904, 23098370, 23383001, 24102466-24102467, 24104250, 24106656, 24107458, 28959971-28959972, 41825791, 41828995, 52654580, 52655318, 60522984, 68643842-68643843, 69973290, 72714626, 72715293, 82148809, 82148810, 83810525, 85310861, 85313430, 85314038-85314039, 86321211, 86323780, 87186066, 87856313, 87856922, 97191260-97191261, 100093150-100093151, 103861021, 109706975-109706976, 110347947, 110350122-110350123, 115664758, 115835518</p>
Log Highlights:	<p>Destination setup</p> <p>195813072 sectors wiped with 21</p> <p>Comparison of original to clone Drive</p> <p>Sectors compared: 120103200</p> <p>Sectors match: 120101737</p> <p>Sectors differ: 1463</p> <p>Bytes differ: 51303</p> <p>Diffs range 10069095-10069119, 10069911-10069951, 12023808-12023871, 18652594-18652607, 18656041-18656063, 18656857-18656895, 18660303-18660351, 18661119, 19746716-19746751, 22233904-22233919, 23098370-23098431, 23383001-23383039, 24102466-24102527, 24104250-24104255, 24106656-24106687, 24107458-24107519,</p>

Test Case DA-09-64 EnCase 5.05f

28959971-28959999, 41825791, 41828995-41829055, 52654580-52654591,
52655318-52655359, 60522984-60523007, 68643842-68643903,
69973290-69973311, 72714626-72714687, 72715293-72715327,
82148809-82148863, 83810525-83810559, 85310861-85310911,
85313430-85313471, 85314038-85314047, 86321211-86321215,
86323780-86323839, 87186066-87186111, 87856313-87856319,
87856922-87856959, 97191260-97191295, 100093150-100093183,
103861021-103861055, 109706975-109707007, 110347947-110347967,
110350122-110350143, 115664758-115664767, 115835518-115835519
Source (120103200) has 75709872 fewer sectors than destination (195813072)
Zero fill: 0
Src Byte fill (ED): 0
Dst Byte fill (21): 75709872
Other fill: 0
Other no fill: 0
Zero fill range:
Src fill range:
Dst fill range: 120103200-195813071
Other fill range:
Other not filled range:
0 source read errors, 0 destination read errors

Start: 05/21/07 07:05:05PM
Acquisition Hash: EAB64F53A8A4F45E51570D1B9787B9FC
Start: 05/21/07 07:38:09PM
Total Sectors: 195,813,072
Input Hash: EAB64F53A8A4F45E51570D1B9787B9FC
Actual Date:05/21/07 07:05:05PM
File Integrity:Completely Verified, 0 Errors
Acquisition Hash:eab64f53a8a4f45e51570d1b9787b9fc
Verify Hash:eab64f53a8a4f45e51570d1b9787b9fc
EnCase Version:5.05f
System Version:Windows XP
Error Granularity:64
Read Errors:0
Missing Sector Errors:0
CRC Errors:0
Total Size:61,492,838,400 bytes (57.3GB)
Total Sectors:120,103,200
Read Errors: 0
Missing Sector Errors: 0
CRC Errors: 0
Compression: Good
-2100 Total Size: 61,492,838,400 bytes (57.3GB)
Total Sectors: 120,103,200

32 different run lengths observed in 44 runs
2 runs of length 1
1 runs of length 2
1 runs of length 5
1 runs of length 6
1 runs of length 7
2 runs of length 10
1 runs of length 12
1 runs of length 14
1 runs of length 16
1 runs of length 21
2 runs of length 22
1 runs of length 23
1 runs of length 24
1 runs of length 25
1 runs of length 29
1 runs of length 32
1 runs of length 33
1 runs of length 34
3 runs of length 35
2 runs of length 36
1 runs of length 38
2 runs of length 39
1 runs of length 41

Test Case DA-09-64 EnCase 5.05f																													
	2 runs of length 42 1 runs of length 46 1 runs of length 49 1 runs of length 51 1 runs of length 55 1 runs of length 60 1 runs of length 61 5 runs of length 62 1 runs of length 64 1463 sectors differ 0 zero filled and 1463 varying non-zero filled Settings: fill none size FAT(2000MB) Write Block: Fastbloc SE																												
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-01 Source acquired using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AM-02 Source is type DS.</td> <td>as expected</td> </tr> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AM-05 An image is created on file system type FS.</td> <td>as expected</td> </tr> <tr> <td>AM-06 All visible sectors acquired.</td> <td>as expected</td> </tr> <tr> <td>AM-08 All sectors accurately acquired.</td> <td>some sectors differ</td> </tr> <tr> <td>AM-09 Error logged.</td> <td>faulty sector not logged</td> </tr> <tr> <td>AM-10 Benign fill replaces inaccessible sectors.</td> <td>undetermined fill source</td> </tr> <tr> <td>AO-01 Image file is complete and accurate.</td> <td>as expected</td> </tr> <tr> <td>AO-05 Multifile image created.</td> <td>as expected</td> </tr> <tr> <td>AO-22 Tool calculates hashes by block.</td> <td>option not available</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> <tr> <td>AO-24 Source is unchanged by acquisition.</td> <td>not checked</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-01 Source acquired using interface AI.	as expected	AM-02 Source is type DS.	as expected	AM-03 Execution environment is XE.	as expected	AM-05 An image is created on file system type FS.	as expected	AM-06 All visible sectors acquired.	as expected	AM-08 All sectors accurately acquired.	some sectors differ	AM-09 Error logged.	faulty sector not logged	AM-10 Benign fill replaces inaccessible sectors.	undetermined fill source	AO-01 Image file is complete and accurate.	as expected	AO-05 Multifile image created.	as expected	AO-22 Tool calculates hashes by block.	option not available	AO-23 Logged information is correct.	as expected	AO-24 Source is unchanged by acquisition.	not checked
Assertion & Expected Result	Actual Result																												
AM-01 Source acquired using interface AI.	as expected																												
AM-02 Source is type DS.	as expected																												
AM-03 Execution environment is XE.	as expected																												
AM-05 An image is created on file system type FS.	as expected																												
AM-06 All visible sectors acquired.	as expected																												
AM-08 All sectors accurately acquired.	some sectors differ																												
AM-09 Error logged.	faulty sector not logged																												
AM-10 Benign fill replaces inaccessible sectors.	undetermined fill source																												
AO-01 Image file is complete and accurate.	as expected																												
AO-05 Multifile image created.	as expected																												
AO-22 Tool calculates hashes by block.	option not available																												
AO-23 Logged information is correct.	as expected																												
AO-24 Source is unchanged by acquisition.	not checked																												
Analysis:	Expected results not achieved																												

5.2.24 DA-10-BEST

Test Case DA-10-BEST EnCase 5.05f					
Case Summary:	DA-10 Acquire a digital source to an image file in an alternate format.				
Assertions:	<p>AM-01 The tool uses access interface SRC-AI to access the digital source.</p> <p>AM-02 The tool acquires digital source DS.</p> <p>AM-03 The tool executes in execution environment XE.</p> <p>AM-05 If image file creation is specified, the tool creates an image file on file system type FS.</p> <p>AM-06 All visible sectors are acquired from the digital source.</p> <p>AM-08 All sectors acquired from the digital source are acquired accurately.</p> <p>AO-01 If the tool creates an image file, the data represented by the image file is the same as the data acquired by the tool.</p> <p>AO-02 If an image file format is specified, the tool creates an image file in the specified format.</p> <p>AO-05 If the tool creates a multi-file image of a requested size then all the individual files shall be no larger than the requested size.</p> <p>AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p> <p>AO-24 If the tool executes in a forensically safe execution environment, the digital source is unchanged by the acquisition process.</p>				
Tester Name:	mrmw				
Test Host:	Joe				
Test Date:	Tue Feb 22 11:34:07 2007				
Drives:	src(43) dst (2) other (01-fu)				
Source Setup:	<pre>src hash (SHA1): < 888E2E7F7AD237DC7A732281DD93F325065E5871 > src hash (MD5): < BC39C3F7EE7A50E77B9BA1E65A5AEFF7 > 78125000 total sectors (40000000000 bytes) Model (0BB-75JHC0) serial # (WD-WMAMC46588) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057143205 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 004208967 1023/001/01 1023/254/63 82 Linux swap 14 x 029431080 027712125 1023/000/01 1023/254/63 05 extended 15 S 000000063 027712062 1023/001/01 1023/254/63 07 NTFS 16 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 020980827 sectors 10742183424 bytes 3 000032067 sectors 16418304 bytes 5 002104452 sectors 1077479424 bytes 7 004192902 sectors 2146765824 bytes 9 008401932 sectors 4301789184 bytes 11 010490382 sectors 5371075584 bytes 13 004208967 sectors 2154991104 bytes 15 027712062 sectors 14188575744 bytes</pre>				
Log Highlights:	<pre>Start: 05/22/07 12:39:31PM Acquisition Hash: BC39C3F7EE7A50E77B9BA1E65A5AEFF7 Settings: fill none size cd Write Block: fastbloc LE 42</pre>				
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-01 Source acquired using interface AI.</td> <td>as expected</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-01 Source acquired using interface AI.	as expected
Assertion & Expected Result	Actual Result				
AM-01 Source acquired using interface AI.	as expected				

Test Case DA-10-BEST EnCase 5.05f		
	AM-02 Source is type DS.	as expected
	AM-03 Execution environment is XE.	as expected
	AM-05 An image is created on file system type FS.	as expected
	AM-06 All visible sectors acquired.	as expected
	AM-08 All sectors accurately acquired.	as expected
	AO-01 Image file is complete and accurate.	as expected
	AO-02 Image file in specified format.	as expected
	AO-05 Multifile image created.	as expected
	AO-22 Tool calculates hashes by block.	option not available
	AO-23 Logged information is correct.	as expected
	AO-24 Source is unchanged by acquisition.	not checked
Analysis:	Expected results achieved	

5.2.25 DA-10-PASSWORD

Test Case DA-10-PASSWORD EnCase 5.05f	
Case Summary:	DA-10 Acquire a digital source to an image file in an alternate format.
Assertions:	<p>AM-01 The tool uses access interface SRC-AI to access the digital source.</p> <p>AM-02 The tool acquires digital source DS.</p> <p>AM-03 The tool executes in execution environment XE.</p> <p>AM-05 If image file creation is specified, the tool creates an image file on file system type FS.</p> <p>AM-06 All visible sectors are acquired from the digital source.</p> <p>AM-08 All sectors acquired from the digital source are acquired accurately.</p> <p>AO-01 If the tool creates an image file, the data represented by the image file is the same as the data acquired by the tool.</p> <p>AO-02 If an image file format is specified, the tool creates an image file in the specified format.</p> <p>AO-05 If the tool creates a multi-file image of a requested size then all the individual files shall be no larger than the requested size.</p> <p>AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p> <p>AO-24 If the tool executes in a forensically safe execution environment, the digital source is unchanged by the acquisition process.</p>
Tester Name:	mrmw
Test Host:	Frank
Test Date:	Thu May 17 12:49:12 2007
Drives:	src(43) dst (55-IDE) other (01-FU)
Source Setup:	<pre>src hash (SHA1): < 888E2E7F7AD237DC7A732281DD93F325065E5871 > src hash (MD5): < BC39C3F7EE7A50E77B9BA1E65A5AEFF7 > 78125000 total sectors (40000000000 bytes) Model (0BB-75JHCO) serial # (WD-WMAMC46588) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057143205 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 004208967 1023/001/01 1023/254/63 82 Linux swap 14 x 029431080 027712125 1023/000/01 1023/254/63 05 extended 15 S 000000063 027712062 1023/001/01 1023/254/63 07 NTFS 16 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 020980827 sectors 10742183424 bytes 3 000032067 sectors 16418304 bytes 5 002104452 sectors 1077479424 bytes 7 004192902 sectors 2146765824 bytes 9 008401932 sectors 4301789184 bytes 11 010490382 sectors 5371075584 bytes 13 004208967 sectors 2154991104 bytes 15 027712062 sectors 14188575744 bytes</pre>
Log Highlights:	<pre>Start: 05/21/07 01:29:06PM Acquisition Hash: BC39C3F7EE7A50E77B9BA1E65A5AEFF7 Start: 05/21/07 01:58:51PM Start Sector: 63 Stop Sector: 20,980,889 Start: 05/21/07 02:00:55PM Start Sector: 20,980,953 Stop Sector: 21,013,019</pre>

Test Case DA-10-PASSWORD EnCase 5.05f																											
	<p>Start: 05/21/07 02:01:17PM Start Sector: 20,980,953 Stop Sector: 21,013,019 Start: 05/21/07 02:01:27PM Start Sector: 21,013,083 Stop Sector: 23,117,534 Start: 05/21/07 02:01:50PM Start Sector: 23,117,598 Stop Sector: 27,310,499 Start: 05/21/07 02:02:29PM Start Sector: 27,310,563 Stop Sector: 35,712,494 Start: 05/21/07 02:03:14PM Start Sector: 35,712,558 Stop Sector: 46,202,939 Start: 05/21/07 02:04:08PM Start Sector: 46,203,003 Stop Sector: 50,411,969 Start: 05/21/07 02:04:35PM Start Sector: 50,412,033 Stop Sector: 78,124,094 Start: 05/21/07 02:07:48PM Total Sectors: 390,721,968 Actual Date:05/21/07 01:29:06PM File Integrity:Completely Verified, 0 Errors Verify Hash:bc39c3f7ee7a50e77b9bale65a5aeeef7 EnCase Version:5.05f System Version:Windows XP Error Granularity:64 Read Errors:0 Missing Sector Errors:0 CRC Errors:0 Total Size:40,000,000,000 bytes (37.3GB) Total Sectors:78,125,000 Settings: fill none size cd Write Block: Tableau 6 FW800</p>																										
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-01 Source acquired using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AM-02 Source is type DS.</td> <td>as expected</td> </tr> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AM-05 An image is created on file system type FS.</td> <td>as expected</td> </tr> <tr> <td>AM-06 All visible sectors acquired.</td> <td>as expected</td> </tr> <tr> <td>AM-08 All sectors accurately acquired.</td> <td>as expected</td> </tr> <tr> <td>AO-01 Image file is complete and accurate.</td> <td>as expected</td> </tr> <tr> <td>AO-02 Image file in specified format.</td> <td>as expected</td> </tr> <tr> <td>AO-05 Multifile image created.</td> <td>as expected</td> </tr> <tr> <td>AO-22 Tool calculates hashes by block.</td> <td>option not available</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> <tr> <td>AO-24 Source is unchanged by acquisition.</td> <td>not checked</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-01 Source acquired using interface AI.	as expected	AM-02 Source is type DS.	as expected	AM-03 Execution environment is XE.	as expected	AM-05 An image is created on file system type FS.	as expected	AM-06 All visible sectors acquired.	as expected	AM-08 All sectors accurately acquired.	as expected	AO-01 Image file is complete and accurate.	as expected	AO-02 Image file in specified format.	as expected	AO-05 Multifile image created.	as expected	AO-22 Tool calculates hashes by block.	option not available	AO-23 Logged information is correct.	as expected	AO-24 Source is unchanged by acquisition.	not checked
Assertion & Expected Result	Actual Result																										
AM-01 Source acquired using interface AI.	as expected																										
AM-02 Source is type DS.	as expected																										
AM-03 Execution environment is XE.	as expected																										
AM-05 An image is created on file system type FS.	as expected																										
AM-06 All visible sectors acquired.	as expected																										
AM-08 All sectors accurately acquired.	as expected																										
AO-01 Image file is complete and accurate.	as expected																										
AO-02 Image file in specified format.	as expected																										
AO-05 Multifile image created.	as expected																										
AO-22 Tool calculates hashes by block.	option not available																										
AO-23 Logged information is correct.	as expected																										
AO-24 Source is unchanged by acquisition.	not checked																										
Analysis:	Expected results achieved																										

5.2.26 DA-10-UNCOMPRESSED

Test Case DA-10-UNCOMPRESSED EnCase 5.05f	
Case Summary:	DA-10 Acquire a digital source to an image file in an alternate format.
Assertions:	<p>AM-01 The tool uses access interface SRC-AI to access the digital source.</p> <p>AM-02 The tool acquires digital source DS.</p> <p>AM-03 The tool executes in execution environment XE.</p> <p>AM-05 If image file creation is specified, the tool creates an image file on file system type FS.</p> <p>AM-06 All visible sectors are acquired from the digital source.</p> <p>AM-08 All sectors acquired from the digital source are acquired accurately.</p> <p>AO-01 If the tool creates an image file, the data represented by the image file is the same as the data acquired by the tool.</p> <p>AO-02 If an image file format is specified, the tool creates an image file in the specified format.</p> <p>AO-05 If the tool creates a multi-file image of a requested size then all the individual files shall be no larger than the requested size.</p> <p>AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p> <p>AO-24 If the tool executes in a forensically safe execution environment, the digital source is unchanged by the acquisition process.</p>
Tester Name:	mrmw
Test Host:	Joe
Test Date:	Tue May 22 14:41:53 2007
Drives:	src(43) dst (29) other (01-fu)
Source Setup:	<pre>src hash (SHA1): < 888E2E7F7AD237DC7A732281DD93F325065E5871 > src hash (MD5): < BC39C3F7EE7A50E77B9BA1E65A5AEF7 > 78125000 total sectors (40000000000 bytes) Model (0BB-75JHCO) serial # (WD-WMAMC46588) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057143205 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 004208967 1023/001/01 1023/254/63 82 Linux swap 14 x 029431080 027712125 1023/000/01 1023/254/63 05 extended 15 S 000000063 027712062 1023/001/01 1023/254/63 07 NTFS 16 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 020980827 sectors 10742183424 bytes 3 000032067 sectors 16418304 bytes 5 002104452 sectors 1077479424 bytes 7 004192902 sectors 2146765824 bytes 9 008401932 sectors 4301789184 bytes 11 010490382 sectors 5371075584 bytes 13 004208967 sectors 2154991104 bytes 15 027712062 sectors 14188575744 bytes</pre>
Log Highlights:	<pre>Actual Date:05/23/07 07:33:27AM Acquisition Hash:bc39c3f7ee7a50e77b9ba1e65a5aef7 EnCase Version:5.05f System Version:Windows 2003 Server Error Granularity:64 Read Errors:0 Missing Sector Errors:0 CRC Errors:0</pre>

Test Case DA-10-UNCOMPRESSED EnCase 5.05f																											
	Total Size:40,000,000,000 bytes (37.3GB) Total Sectors:78,125,000 Settings: fill none size cd Write Block: Fastbloc FE 45 FW800																										
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-01 Source acquired using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AM-02 Source is type DS.</td> <td>as expected</td> </tr> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AM-05 An image is created on file system type FS.</td> <td>as expected</td> </tr> <tr> <td>AM-06 All visible sectors acquired.</td> <td>as expected</td> </tr> <tr> <td>AM-08 All sectors accurately acquired.</td> <td>as expected</td> </tr> <tr> <td>AO-01 Image file is complete and accurate.</td> <td>as expected</td> </tr> <tr> <td>AO-02 Image file in specified format.</td> <td>as expected</td> </tr> <tr> <td>AO-05 Multifile image created.</td> <td>as expected</td> </tr> <tr> <td>AO-22 Tool calculates hashes by block.</td> <td>option not available</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> <tr> <td>AO-24 Source is unchanged by acquisition.</td> <td>not checked</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-01 Source acquired using interface AI.	as expected	AM-02 Source is type DS.	as expected	AM-03 Execution environment is XE.	as expected	AM-05 An image is created on file system type FS.	as expected	AM-06 All visible sectors acquired.	as expected	AM-08 All sectors accurately acquired.	as expected	AO-01 Image file is complete and accurate.	as expected	AO-02 Image file in specified format.	as expected	AO-05 Multifile image created.	as expected	AO-22 Tool calculates hashes by block.	option not available	AO-23 Logged information is correct.	as expected	AO-24 Source is unchanged by acquisition.	not checked
Assertion & Expected Result	Actual Result																										
AM-01 Source acquired using interface AI.	as expected																										
AM-02 Source is type DS.	as expected																										
AM-03 Execution environment is XE.	as expected																										
AM-05 An image is created on file system type FS.	as expected																										
AM-06 All visible sectors acquired.	as expected																										
AM-08 All sectors accurately acquired.	as expected																										
AO-01 Image file is complete and accurate.	as expected																										
AO-02 Image file in specified format.	as expected																										
AO-05 Multifile image created.	as expected																										
AO-22 Tool calculates hashes by block.	option not available																										
AO-23 Logged information is correct.	as expected																										
AO-24 Source is unchanged by acquisition.	not checked																										
Analysis:	Expected results achieved																										

5.2.27 DA-12

Test Case DA-12 EnCase 5.05f																																														
Case Summary:	DA-12 Attempt to create an image file where there is insufficient space.																																													
Assertions:	<p>AM-01 The tool uses access interface SRC-AI to access the digital source.</p> <p>AM-02 The tool acquires digital source DS.</p> <p>AM-03 The tool executes in execution environment XE.</p> <p>AM-05 If image file creation is specified, the tool creates an image file on file system type FS.</p> <p>AO-04 If the tool is creating an image file and there is insufficient space on the image destination device to contain the image file, the tool shall notify the user.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p> <p>AO-24 If the tool executes in a forensically safe execution environment, the digital source is unchanged by the acquisition process.</p>																																													
Tester Name:	mrmw																																													
Test Host:	Frank																																													
Test Date:	Wed Jun 13 10:00:48 2007																																													
Drives:	src(2A) dst (none) other (none)																																													
Source Setup:	<p>src hash (SHA256): < AE8E839101661367D92803D5F5D408268635EFD8A05FEA633838CDC3919F5ABA > src hash (SHA1): < F5F9F2903DCAB895F36E270FB22A722E27918125 > src hash (MD5): < 91E0AC905F682ECF6DE4E9835089B519 > 17783249 total sectors (9105023488 bytes)</p> <p>Model (QM39100TD-SCA) serial # (PCB=20-116711-06 HDAQM39100TD-SCA)</p> <table border="1"> <thead> <tr> <th>N</th> <th>Start</th> <th>LBA</th> <th>Length</th> <th>Start C/H/S</th> <th>End C/H/S</th> <th>boot</th> <th>Partition</th> <th>type</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>P</td> <td>000000063</td> <td>017751762</td> <td>0000/001/01</td> <td>1023/254/63</td> <td>Boot</td> <td>07</td> <td>NTFS</td> </tr> <tr> <td>2</td> <td>P</td> <td>000000000</td> <td>000000000</td> <td>0000/000/00</td> <td>0000/000/00</td> <td></td> <td>00</td> <td>empty entry</td> </tr> <tr> <td>3</td> <td>P</td> <td>000000000</td> <td>000000000</td> <td>0000/000/00</td> <td>0000/000/00</td> <td></td> <td>00</td> <td>empty entry</td> </tr> <tr> <td>4</td> <td>P</td> <td>000000000</td> <td>000000000</td> <td>0000/000/00</td> <td>0000/000/00</td> <td></td> <td>00</td> <td>empty entry</td> </tr> </tbody> </table> <p>1 017751762 sectors 9088902144 bytes</p>	N	Start	LBA	Length	Start C/H/S	End C/H/S	boot	Partition	type	1	P	000000063	017751762	0000/001/01	1023/254/63	Boot	07	NTFS	2	P	000000000	000000000	0000/000/00	0000/000/00		00	empty entry	3	P	000000000	000000000	0000/000/00	0000/000/00		00	empty entry	4	P	000000000	000000000	0000/000/00	0000/000/00		00	empty entry
N	Start	LBA	Length	Start C/H/S	End C/H/S	boot	Partition	type																																						
1	P	000000063	017751762	0000/001/01	1023/254/63	Boot	07	NTFS																																						
2	P	000000000	000000000	0000/000/00	0000/000/00		00	empty entry																																						
3	P	000000000	000000000	0000/000/00	0000/000/00		00	empty entry																																						
4	P	000000000	000000000	0000/000/00	0000/000/00		00	empty entry																																						
Log Highlights:	<p>Start: 06/13/07 10:01:22AM</p> <p>Acquisition Hash: B5A01F014AF64F00756177CAD76486B5</p> <p>Actual Date:06/13/07 10:00:30AM</p> <p>File Integrity:Completely Verified, 0 Errors</p> <p>Acquisition Hash:b5a01f014af64f00756177cad76486b5</p> <p>Verify Hash:069b35ebfbb4e5a4e79b8f6e6cfbb4b2</p> <p>EnCase Version:5.05f</p> <p>System Version:Windows XP</p> <p>Error Granularity:64</p> <p>Read Errors:0</p> <p>Missing Sector Errors:1</p> <p>CRC Errors:0</p> <p>Total Size:9,105,023,488 bytes (8.5GB)</p> <p>Total Sectors:17,783,249</p> <p>Settings: fill none</p> <p>Write Block: FastBloc SE</p>																																													
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-01 Source acquired using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AM-02 Source is type DS.</td> <td>as expected</td> </tr> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AM-05 An image is created on file system type FS.</td> <td>as expected</td> </tr> <tr> <td>AO-04 User notified if space exhausted.</td> <td>as expected</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> <tr> <td>AO-24 Source is unchanged by acquisition.</td> <td>not checked</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-01 Source acquired using interface AI.	as expected	AM-02 Source is type DS.	as expected	AM-03 Execution environment is XE.	as expected	AM-05 An image is created on file system type FS.	as expected	AO-04 User notified if space exhausted.	as expected	AO-23 Logged information is correct.	as expected	AO-24 Source is unchanged by acquisition.	not checked																													
Assertion & Expected Result	Actual Result																																													
AM-01 Source acquired using interface AI.	as expected																																													
AM-02 Source is type DS.	as expected																																													
AM-03 Execution environment is XE.	as expected																																													
AM-05 An image is created on file system type FS.	as expected																																													
AO-04 User notified if space exhausted.	as expected																																													
AO-23 Logged information is correct.	as expected																																													
AO-24 Source is unchanged by acquisition.	not checked																																													
Analysis:	Expected results achieved																																													

5.2.28 DA-13

Test Case DA-13 EnCase 5.05f	
Case Summary:	DA-13 Create an image file where there is insufficient space on a single volume, and use destination device switching to continue on another volume.
Assertions:	<p>AM-01 The tool uses access interface SRC-AI to access the digital source.</p> <p>AM-02 The tool acquires digital source DS.</p> <p>AM-03 The tool executes in execution environment XE.</p> <p>AM-05 If image file creation is specified, the tool creates an image file on file system type FS.</p> <p>AM-06 All visible sectors are acquired from the digital source.</p> <p>AM-08 All sectors acquired from the digital source are acquired accurately.</p> <p>AO-01 If the tool creates an image file, the data represented by the image file is the same as the data acquired by the tool.</p> <p>AO-04 If the tool is creating an image file and there is insufficient space on the image destination device to contain the image file, the tool shall notify the user.</p> <p>AO-05 If the tool creates a multi-file image of a requested size then all the individual files shall be no larger than the requested size.</p> <p>AO-10 If there is insufficient space to contain all files of a multi-file image and if destination device switching is supported, the image is continued on another device.</p> <p>AO-22 If requested, the tool calculates block hashes for a specified block size during an acquisition for each block acquired from the digital source.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p> <p>AO-24 If the tool executes in a forensically safe execution environment, the digital source is unchanged by the acquisition process.</p>
Tester Name:	mrnw
Test Host:	Frank
Test Date:	Wed Jun 13 10:21:48 2007
Drives:	src(2A) dst (none) other (none)
Source Setup:	<pre>src hash (SHA256): < AE8E839101661367D92803D5F5D408268635EFD8A05FEA633838CDC3919F5ABA > src hash (SHA1): < F5F9F2903DCAB895F36E270FB22A722E27918125 > src hash (MD5): < 91E0AC905F682ECF6DE4E9835089B519 > 17783249 total sectors (9105023488 bytes) Model (QM39100TD-SCA) serial # (PCB=20-116711-06 HDAQM39100TD-SCA) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 017751762 0000/001/01 1023/254/63 Boot 07 NTFS 2 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 3 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 4 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 017751762 sectors 9088902144 bytes</pre>
Log Highlights:	<pre>Start: 06/13/07 11:31:53AM Start Sector: 0 Stop Sector: 17,783,248 Hash Value: 91E0AC905F682ECF6DE4E9835089B519 Actual Date:06/13/07 10:26:15AM File Integrity:Completely Verified, 0 Errors Acquisition Hash:91e0ac905f682ecf6de4e9835089b519 Verify Hash:91e0ac905f682ecf6de4e9835089b519 EnCase Version:5.05f System Version:Windows XP Error Granularity:64 Read Errors:0 Missing Sector Errors:0 CRC Errors:0 Total Size:9,105,023,488 bytes (8.5GB) Total Sectors:17,783,249 Actual Date:06/13/07 10:26:15AM File Integrity:Completely Verified, 0 Errors Acquisition Hash:91e0ac905f682ecf6de4e9835089b519 Verify Hash:91e0ac905f682ecf6de4e9835089b519 EnCase Version:5.05f System Version:Windows XP</pre>

Test Case DA-13 EnCase 5.05f																													
	Error Granularity:64 Read Errors:0 Missing Sector Errors:0 CRC Errors:0 Total Size:9,105,023,488 bytes (8.5GB) Total Sectors:17,783,249 Start: 06/13/07 11:34:19AM Start Sector: 0 Stop Sector: 17,783,248 Hash Value: 91E0AC905F682ECF6DE4E9835089B519 Settings: fill none Write Block: FastBloc SE																												
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-01 Source acquired using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AM-02 Source is type DS.</td> <td>as expected</td> </tr> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AM-05 An image is created on file system type FS.</td> <td>as expected</td> </tr> <tr> <td>AM-06 All visible sectors acquired.</td> <td>as expected</td> </tr> <tr> <td>AM-08 All sectors accurately acquired.</td> <td>as expected</td> </tr> <tr> <td>AO-01 Image file is complete and accurate.</td> <td>as expected</td> </tr> <tr> <td>AO-04 User notified if space exhausted.</td> <td>as expected</td> </tr> <tr> <td>AO-05 Multifile image created.</td> <td>as expected</td> </tr> <tr> <td>AO-10 Image file continued on new device.</td> <td>as expected</td> </tr> <tr> <td>AO-22 Tool calculates hashes by block.</td> <td>option not available</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> <tr> <td>AO-24 Source is unchanged by acquisition.</td> <td>not checked</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-01 Source acquired using interface AI.	as expected	AM-02 Source is type DS.	as expected	AM-03 Execution environment is XE.	as expected	AM-05 An image is created on file system type FS.	as expected	AM-06 All visible sectors acquired.	as expected	AM-08 All sectors accurately acquired.	as expected	AO-01 Image file is complete and accurate.	as expected	AO-04 User notified if space exhausted.	as expected	AO-05 Multifile image created.	as expected	AO-10 Image file continued on new device.	as expected	AO-22 Tool calculates hashes by block.	option not available	AO-23 Logged information is correct.	as expected	AO-24 Source is unchanged by acquisition.	not checked
Assertion & Expected Result	Actual Result																												
AM-01 Source acquired using interface AI.	as expected																												
AM-02 Source is type DS.	as expected																												
AM-03 Execution environment is XE.	as expected																												
AM-05 An image is created on file system type FS.	as expected																												
AM-06 All visible sectors acquired.	as expected																												
AM-08 All sectors accurately acquired.	as expected																												
AO-01 Image file is complete and accurate.	as expected																												
AO-04 User notified if space exhausted.	as expected																												
AO-05 Multifile image created.	as expected																												
AO-10 Image file continued on new device.	as expected																												
AO-22 Tool calculates hashes by block.	option not available																												
AO-23 Logged information is correct.	as expected																												
AO-24 Source is unchanged by acquisition.	not checked																												
Analysis:	Expected results achieved																												

5.2.29 DA-14-ATA28

Test Case DA-14-ATA28 EnCase 5.05f	
Case Summary:	DA-14 Create an unaligned clone from an image file.
Assertions:	<p>AM-03 The tool executes in execution environment XE.</p> <p>AO-12 If requested, a clone is created from an image file.</p> <p>AO-13 A clone is created using access interface DST-AI to write to the clone device.</p> <p>AO-14 If an unaligned clone is created, each sector written to the clone is accurately written to the same disk address on the clone that the sector occupied on the digital source.</p> <p>AO-17 If requested, any excess sectors on a clone destination device are not modified.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p>
Tester Name:	slm
Test Host:	joe
Test Date:	Tue Apr 17 11:14:46 2007
Drives:	src(43) dst (7c) other (fat32)
Source Setup:	<pre>src hash (SHA1): < 888E2E7F7AD237DC7A732281DD93F325065E5871 > src hash (MD5): < BC39C3F7EE7A50E77B9BA1E65A5AEEF7 > 78125000 total sectors (4000000000 bytes) Model (0BB-75JHC0) serial # (WD-WMAMC46588) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057143205 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 004208967 1023/001/01 1023/254/63 82 Linux swap 14 x 029431080 027712125 1023/000/01 1023/254/63 05 extended 15 S 000000063 027712062 1023/001/01 1023/254/63 07 NTFS 16 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 020980827 sectors 10742183424 bytes 3 000032067 sectors 16418304 bytes 5 002104452 sectors 1077479424 bytes 7 004192902 sectors 2146765824 bytes 9 008401932 sectors 4301789184 bytes 11 010490382 sectors 5371075584 bytes 13 004208967 sectors 2154991104 bytes 15 027712062 sectors 14188575744 bytes</pre>
Log Highlights:	<p>Destination setup 78177792 sectors wiped with 7C</p> <p>Comparison of original to clone Drive Sectors compared: 78125000 Sectors match: 78125000 Sectors differ: 0 Bytes differ: 0 Diffs range Source (78125000) has 52792 fewer sectors than destination (78177792) Zero fill: 0 Src Byte fill (43): 0 Dst Byte fill (7C): 52792 Other fill: 0 Other no fill: 0 Zero fill range:</p>

Test Case DA-14-ATA28 EnCase 5.05f															
	Src fill range: Dst fill range: 78125000-78177791 Other fill range: Other not filled range: 0 source read errors, 0 destination read errors Start: 04/18/07 03:27:44PM Total Sectors: 78,177,792 Input Hash: BC39C3F7EE7A50E77B9BA1E65A5AEEF7 Settings: fill none														
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AO-12 A clone is created from an image file.</td> <td>as expected</td> </tr> <tr> <td>AO-13 Clone created using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AO-14 An unaligned clone is created.</td> <td>as expected</td> </tr> <tr> <td>AO-17 Excess sectors are unchanged.</td> <td>as expected</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-03 Execution environment is XE.	as expected	AO-12 A clone is created from an image file.	as expected	AO-13 Clone created using interface AI.	as expected	AO-14 An unaligned clone is created.	as expected	AO-17 Excess sectors are unchanged.	as expected	AO-23 Logged information is correct.	as expected
Assertion & Expected Result	Actual Result														
AM-03 Execution environment is XE.	as expected														
AO-12 A clone is created from an image file.	as expected														
AO-13 Clone created using interface AI.	as expected														
AO-14 An unaligned clone is created.	as expected														
AO-17 Excess sectors are unchanged.	as expected														
AO-23 Logged information is correct.	as expected														
Analysis:	Expected results achieved														

5.2.30 DA-14-ATA48

Test Case DA-14-ATA48 EnCase 5.05f	
Case Summary:	DA-14 Create an unaligned clone from an image file.
Assertions:	<p>AM-03 The tool executes in execution environment XE.</p> <p>AO-12 If requested, a clone is created from an image file.</p> <p>AO-13 A clone is created using access interface DST-AI to write to the clone device.</p> <p>AO-14 If an unaligned clone is created, each sector written to the clone is accurately written to the same disk address on the clone that the sector occupied on the digital source.</p> <p>AO-17 If requested, any excess sectors on a clone destination device are not modified.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p>
Tester Name:	slm
Test Host:	joe
Test Date:	Thu Apr 12 12:07:10 2007
Drives:	src(4C) dst (2a-ide) other (fat)
Source Setup:	<pre>src hash (SHA1): < 8FF620D2BEDCCAFE8412EDAAD56C8554F872EFBF > src hash (MD5): < D10F763B56D4CEBA2D1311C61F9FB382 > 390721968 total sectors (200049647616 bytes) 24320/254/63 (max cyl/hd values) 24321/255/63 (number of cyl/hd) IDE disk: Model (WDC WD2000JB-00KFA0) serial # (WD-WMAMR103111) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 390700737 0000/001/01 1023/254/63 Boot 07 NTFS 2 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 3 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 4 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 390700737 sectors 200038777344 bytes</pre>
Log Highlights:	<pre>Destination setup 490234752 sectors wiped with 2A Comparision of original to clone Drive Sectors compared: 390721968 Sectors match: 390721968 Sectors differ: 0 Bytes differ: 0 Diffs range Source (390721968) has 99512784 fewer sectors than destination (490234752) Zero fill: 0 Src Byte fill (4C): 0 Dst Byte fill (2A): 99512784 Other fill: 0 Other no fill: 0 Zero fill range: Src fill range: Dst fill range: 390721968-490234751 Other fill range: Other not filled range: 0 source read errors, 0 destination read errors Start: 04/12/07 12:21:29PM Total Sectors: 490,234,752 Input Hash: D10F763B56D4CEBA2D1311C61F9FB382 Actual Date:04/03/07 03:50:36PM Acquisition Hash:d10f763b56d4ceba2d1311c61f9fb382 EnCase Version:5.05f System Version:Windows 2003 Server Error Granularity:64 Read Errors:0 Missing Sector Errors:0 CRC Errors:0 Total Size:200,049,647,616 bytes (186.3GB) Total Sectors:390,721,968</pre>

Test Case DA-14-ATA48 EnCase 5.05f															
	Settings: fill none														
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AO-12 A clone is created from an image file.</td> <td>as expected</td> </tr> <tr> <td>AO-13 Clone created using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AO-14 An unaligned clone is created.</td> <td>as expected</td> </tr> <tr> <td>AO-17 Excess sectors are unchanged.</td> <td>as expected</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-03 Execution environment is XE.	as expected	AO-12 A clone is created from an image file.	as expected	AO-13 Clone created using interface AI.	as expected	AO-14 An unaligned clone is created.	as expected	AO-17 Excess sectors are unchanged.	as expected	AO-23 Logged information is correct.	as expected
Assertion & Expected Result	Actual Result														
AM-03 Execution environment is XE.	as expected														
AO-12 A clone is created from an image file.	as expected														
AO-13 Clone created using interface AI.	as expected														
AO-14 An unaligned clone is created.	as expected														
AO-17 Excess sectors are unchanged.	as expected														
AO-23 Logged information is correct.	as expected														
Analysis:	Expected results achieved														

5.2.31 DA-14-BEST

Test Case DA-14-BEST EnCase 5.05f	
Case Summary:	DA-14 Create an unaligned clone from an image file.
Assertions:	<p>AM-03 The tool executes in execution environment XE.</p> <p>AO-12 If requested, a clone is created from an image file.</p> <p>AO-13 A clone is created using access interface DST-AI to write to the clone device.</p> <p>AO-14 If an unaligned clone is created, each sector written to the clone is accurately written to the same disk address on the clone that the sector occupied on the digital source.</p> <p>AO-17 If requested, any excess sectors on a clone destination device are not modified.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p>
Tester Name:	mrmw
Test Host:	Freddy
Test Date:	Fri Nov 30 15:59:45 2007
Drives:	src(43) dst (7B) other (06-FU)
Source Setup:	<pre> src hash (SHA1): < 888E2E7F7AD237DC7A732281DD93F325065E5871 > src hash (MD5): < BC39C3F7EE7A50E77B9BA1E65A5AEEF7 > 78125000 total sectors (4000000000 bytes) Model (0BB-75JHC0) serial # (WD-WMAMC46588) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057143205 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 004208967 1023/001/01 1023/254/63 82 Linux swap 14 x 029431080 027712125 1023/000/01 1023/254/63 05 extended 15 S 000000063 027712062 1023/001/01 1023/254/63 07 NTFS 16 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 020980827 sectors 10742183424 bytes 3 000032067 sectors 16418304 bytes 5 002104452 sectors 1077479424 bytes 7 004192902 sectors 2146765824 bytes 9 008401932 sectors 4301789184 bytes 11 010490382 sectors 5371075584 bytes 13 004208967 sectors 2154991104 bytes 15 027712062 sectors 14188575744 bytes </pre>
Log Highlights:	<p>Destination setup</p> <p>78177792 sectors wiped with 7B</p> <p>Comparison of original to clone Drive</p> <p>Sectors compared: 78125000</p> <p>Sectors match: 78125000</p> <p>Sectors differ: 0</p> <p>Bytes differ: 0</p> <p>Diffs range</p> <p>Source (78125000) has 52792 fewer sectors than destination (78177792)</p> <p>Zero fill: 0</p> <p>Src Byte fill (43): 0</p> <p>Dst Byte fill (7B): 52792</p> <p>Other fill: 0</p> <p>Other no fill: 0</p> <p>Zero fill range:</p>

Test Case DA-14-BEST EnCase 5.05f															
	<p>Src fill range: Dst fill range: 78125000-78177791 Other fill range: Other not filled range: 0 source read errors, 0 destination read errors</p> <p>Start: 11/30/07 05:24:05PM Total Sectors: 78,177,792 Input Hash: BC39C3F7EE7A50E77B9BA1E65A5AEF7 Actual Date:11/30/07 02:49:32PM File Integrity:Completely Verified, 0 Errors Acquisition Hash:bc39c3f7ee7a50e77b9bale65a5aeef7 Verify Hash:bc39c3f7ee7a50e77b9bale65a5aeef7 EnCase Version:5.05f System Version:Windows XP Error Granularity:64 Read Errors:0 Missing Sector Errors:0 CRC Errors:0 Total Size:40,000,000,000 bytes (37.3GB) Total Sectors:78,125,000 Settings: fill none</p>														
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AO-12 A clone is created from an image file.</td> <td>as expected</td> </tr> <tr> <td>AO-13 Clone created using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AO-14 An unaligned clone is created.</td> <td>as expected</td> </tr> <tr> <td>AO-17 Excess sectors are unchanged.</td> <td>as expected</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-03 Execution environment is XE.	as expected	AO-12 A clone is created from an image file.	as expected	AO-13 Clone created using interface AI.	as expected	AO-14 An unaligned clone is created.	as expected	AO-17 Excess sectors are unchanged.	as expected	AO-23 Logged information is correct.	as expected
Assertion & Expected Result	Actual Result														
AM-03 Execution environment is XE.	as expected														
AO-12 A clone is created from an image file.	as expected														
AO-13 Clone created using interface AI.	as expected														
AO-14 An unaligned clone is created.	as expected														
AO-17 Excess sectors are unchanged.	as expected														
AO-23 Logged information is correct.	as expected														
Analysis:	Expected results achieved														

5.2.32 DA-14-CF

Test Case DA-14-CF EnCase 5.05f							
Case Summary:	DA-14 Create an unaligned clone from an image file.						
Assertions:	<p>AM-03 The tool executes in execution environment XE.</p> <p>AO-12 If requested, a clone is created from an image file.</p> <p>AO-13 A clone is created using access interface DST-AI to write to the clone device.</p> <p>AO-14 If an unaligned clone is created, each sector written to the clone is accurately written to the same disk address on the clone that the sector occupied on the digital source.</p> <p>AO-17 If requested, any excess sectors on a clone destination device are not modified.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p>						
Tester Name:	mrmw						
Test Host:	Frank						
Test Date:	Fri Sep 14 11:06:13 2007						
Drives:	src(C1-CF) dst (C2-CF) other (01-FU)						
Source Setup:	<pre>src hash (SHA256): < C7CF0218222DF80D5316511D6814266C7FA507C13F795AD3D323BB73C1590D80 > src hash (SHA1): < 5B8235178DF99FA307430C088F81746606638A0B > src hash (MD5): < 776DF8B4D2589E21DEBCF589EDC16D78 > 503808 total sectors (257949696 bytes) Model (CF) serial # () N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 778135908 1141509631 0357/116/40 0357/032/45 Boot 72 other 2 P 168689522 1936028240 0288/115/43 0367/114/50 Boot 65 other 3 P 1869881465 1936028192 0366/032/33 0357/032/43 Boot 79 other 4 P 2885681152 000055499 0372/097/50 0000/010/00 Boot 0D other 1 1141509631 sectors 584452931072 bytes 2 1936028240 sectors 991246458880 bytes 3 1936028192 sectors 991246434304 bytes 4 000055499 sectors 28415488 bytes</pre>						
Log Highlights:	<p>Destination setup 503808 sectors wiped with 2</p> <p>Comparision of original to clone Drive Sectors compared: 503808 Sectors match: 503808 Sectors differ: 0 Bytes differ: 0 Diffs range 0 source read errors, 0 destination read errors</p> <p>Actual Date:09/14/07 01:59:26PM File Integrity:Completely Verified, 0 Errors Acquisition Hash:776df8b4d2589e21debcf589edc16d78 Verify Hash:776df8b4d2589e21debcf589edc16d78 EnCase Version:5.05f System Version:Windows 2003 Server Error Granularity:64 Read Errors:0 Missing Sector Errors:0 CRC Errors:0 Total Size:257,949,696 bytes (246MB) Total Sectors:503,808 Settings: size CD (640 MB) fill none Write Block: 7 UltraBlock Forensi Card Reader</p>						
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AO-12 A clone is created from an image file.</td> <td>as expected</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-03 Execution environment is XE.	as expected	AO-12 A clone is created from an image file.	as expected
Assertion & Expected Result	Actual Result						
AM-03 Execution environment is XE.	as expected						
AO-12 A clone is created from an image file.	as expected						

Test Case DA-14-CF EnCase 5.05f		
	AO-13 Clone created using interface AI.	as expected
	AO-14 An unaligned clone is created.	as expected
	AO-17 Excess sectors are unchanged.	as expected
	AO-23 Logged information is correct.	as expected
Analysis:	Expected results achieved	

5.2.33 DA-14-F12

Test Case DA-14-F12 EnCase 5.05f	
Case Summary:	DA-14 Create an unaligned clone from an image file.
Assertions:	<p>AM-03 The tool executes in execution environment XE.</p> <p>AO-12 If requested, a clone is created from an image file.</p> <p>AO-13 A clone is created using access interface DST-AI to write to the clone device.</p> <p>AO-14 If an unaligned clone is created, each sector written to the clone is accurately written to the same disk address on the clone that the sector occupied on the digital source.</p> <p>AO-17 If requested, any excess sectors on a clone destination device are not modified.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p>
Tester Name:	mrmw
Test Host:	Frank
Test Date:	Thu Jun 21 09:33:44 2007
Drives:	src(01) dst (63) other (02-FU)
Source Setup:	<pre>src hash (SHA1): < A48BB5665D6DC57C22DB68E2F723DA9AA8DF82B9 > src hash (MD5): < F458F673894753FA6A0EC8B8EC63848E > 78165360 total sectors (40020664320 bytes) Model (0BB-00JHC0) serial # (WD-WMAMC74171) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057175335 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 004208967 1023/001/01 1023/254/63 82 Linux swap 14 x 029431080 027744255 1023/000/01 1023/254/63 05 extended 15 S 000000063 027744192 1023/001/01 1023/254/63 07 NTFS 16 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 020980827 sectors 10742183424 bytes 3 000032067 sectors 16418304 bytes 5 002104452 sectors 1077479424 bytes 7 004192902 sectors 2146765824 bytes 9 008401932 sectors 4301789184 bytes 11 010490382 sectors 5371075584 bytes 13 004208967 sectors 2154991104 bytes 15 027744192 sectors 14205026304 bytes</pre>
Log Highlights:	<pre>Destination setup 12594960 sectors wiped with 63 Comparison of original to clone Partition Sectors compared: 32067 Sectors match: 32067 Sectors differ: 0 Bytes differ: 0 Diffs range: run start Thu Jun 21 16:16:11 2007 run finish Thu Jun 21 16:16:19 2007 elapsed time 0:0:8 Normal exit Start: 06/21/07 01:15:49PM Total Sectors: 64,197 Input Hash: E20E3CFAE80BF6F2D2AA75E829CC8CD9 Start: 06/21/07 04:32:04PM</pre>

Test Case DA-14-F12 EnCase 5.05f															
	Start Sector: 0 Stop Sector: 32,066 Hash Value: E20E3CFEA80BF6F2D2AA75E829CC8CD9 Total Capacity:16,384,000 bytes (15.6MB) Total Clusters:4,000Unallocated:16,248,832 bytes (15.5MB) OEM Version:MSWIN4.0Serial Number:8AC5-98DE Actual Date:06/20/07 03:01:39PM File Integrity:Completely Verified, 0 Errors Acquisition Hash:e20e3cfea80bf6f2d2aa75e829cc8cd9 Verify Hash:e20e3cfea80bf6f2d2aa75e829cc8cd9 EnCase Version:5.05f System Version:Windows 2000 Error Granularity:64 Read Errors:0 Missing Sector Errors:0 CRC Errors:0 Total Size:16,418,304 bytes (15.7MB) Total Sectors:32,067 Settings: fill none														
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AO-12 A clone is created from an image file.</td> <td>as expected</td> </tr> <tr> <td>AO-13 Clone created using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AO-14 An unaligned clone is created.</td> <td>as expected</td> </tr> <tr> <td>AO-17 Excess sectors are unchanged.</td> <td>as expected</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-03 Execution environment is XE.	as expected	AO-12 A clone is created from an image file.	as expected	AO-13 Clone created using interface AI.	as expected	AO-14 An unaligned clone is created.	as expected	AO-17 Excess sectors are unchanged.	as expected	AO-23 Logged information is correct.	as expected
Assertion & Expected Result	Actual Result														
AM-03 Execution environment is XE.	as expected														
AO-12 A clone is created from an image file.	as expected														
AO-13 Clone created using interface AI.	as expected														
AO-14 An unaligned clone is created.	as expected														
AO-17 Excess sectors are unchanged.	as expected														
AO-23 Logged information is correct.	as expected														
Analysis:	Expected results achieved														

5.2.34 DA-14-F16

Test Case DA-14-F16 EnCase 5.05f	
Case Summary:	DA-14 Create an unaligned clone from an image file.
Assertions:	<p>AM-03 The tool executes in execution environment XE.</p> <p>AO-12 If requested, a clone is created from an image file.</p> <p>AO-13 A clone is created using access interface DST-AI to write to the clone device.</p> <p>AO-14 If an unaligned clone is created, each sector written to the clone is accurately written to the same disk address on the clone that the sector occupied on the digital source.</p> <p>AO-17 If requested, any excess sectors on a clone destination device are not modified.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p>
Tester Name:	slm
Test Host:	joe
Test Date:	Mon Apr 23 14:37:44 2007
Drives:	src(43) dst (7c) other (-new_log)
Source Setup:	<pre> src hash (SHA1): < 888E2E7F7AD237DC7A732281DD93F325065E5871 > src hash (MD5): < BC39C3F7EE7A50E77B9BA1E65A5AEEF7 > 78125000 total sectors (4000000000 bytes) Model (0BB-75JHC0) serial # (WD-WMAMC46588) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057143205 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 004208967 1023/001/01 1023/254/63 82 Linux swap 14 x 029431080 027712125 1023/000/01 1023/254/63 05 extended 15 S 000000063 027712062 1023/001/01 1023/254/63 07 NTFS 16 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 020980827 sectors 10742183424 bytes 3 000032067 sectors 16418304 bytes 5 002104452 sectors 1077479424 bytes 7 004192902 sectors 2146765824 bytes 9 008401932 sectors 4301789184 bytes 11 010490382 sectors 5371075584 bytes 13 004208967 sectors 2154991104 bytes 15 027712062 sectors 14188575744 bytes </pre>
Log Highlights:	<pre> Destination setup 78177792 sectors wiped with 7C Comparison of original to clone Partition Sectors compared: 2104452 Sectors match: 2104452 Sectors differ: 0 Bytes differ: 0 Diffs range: Source (2104452) has 160650 fewer sectors than destination (2265102) Zero fill: 0 Src Byte fill (43): 0 Dst Byte fill (7C): 160650 Other fill: 0 Other no fill: 0 Zero fill range: Src fill range: </pre>

Test Case DA-14-F16 EnCase 5.05f															
	Dst fill range: 2104452-2265101 Other fill range: Other not filled range: run start Wed Apr 25 14:37:57 2007 run finish Wed Apr 25 14:41:00 2007 elapsed time 0:3:3 Normal exit Start: 04/25/07 02:58:56PM Total Sectors: 2,265,102 Input Hash: 37E81FFB31C3CB38AA48B2237500908E														
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AO-12 A clone is created from an image file.</td> <td>as expected</td> </tr> <tr> <td>AO-13 Clone created using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AO-14 An unaligned clone is created.</td> <td>as expected</td> </tr> <tr> <td>AO-17 Excess sectors are unchanged.</td> <td>as expected</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-03 Execution environment is XE.	as expected	AO-12 A clone is created from an image file.	as expected	AO-13 Clone created using interface AI.	as expected	AO-14 An unaligned clone is created.	as expected	AO-17 Excess sectors are unchanged.	as expected	AO-23 Logged information is correct.	as expected
Assertion & Expected Result	Actual Result														
AM-03 Execution environment is XE.	as expected														
AO-12 A clone is created from an image file.	as expected														
AO-13 Clone created using interface AI.	as expected														
AO-14 An unaligned clone is created.	as expected														
AO-17 Excess sectors are unchanged.	as expected														
AO-23 Logged information is correct.	as expected														
Analysis:	Expected results achieved														

5.2.35 DA-14-F32

Test Case DA-14-F32 EnCase 5.05f	
Case Summary:	DA-14 Create an unaligned clone from an image file.
Assertions:	<p>AM-03 The tool executes in execution environment XE.</p> <p>AO-12 If requested, a clone is created from an image file.</p> <p>AO-13 A clone is created using access interface DST-AI to write to the clone device.</p> <p>AO-14 If an unaligned clone is created, each sector written to the clone is accurately written to the same disk address on the clone that the sector occupied on the digital source.</p> <p>AO-17 If requested, any excess sectors on a clone destination device are not modified.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p>
Tester Name:	slm
Test Host:	joe
Test Date:	Mon May 7 14:36:49 2007
Drives:	src(01-ide) dst (7e) other (ntfs)
Source Setup:	<pre>src hash (SHA1): < A48BB5665D6DC57C22DB68E2F723DA9AA8DF82B9 > src hash (MD5): < F458F673894753FA6A0EC8B8EC63848E > 78165360 total sectors (40020664320 bytes) Model (0BB-00JHC0) serial # (WD-WMAMC74171) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057175335 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 004208967 1023/001/01 1023/254/63 82 Linux swap 14 x 029431080 027744255 1023/000/01 1023/254/63 05 extended 15 S 000000063 027744192 1023/001/01 1023/254/63 07 NTFS 16 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 020980827 sectors 10742183424 bytes 3 000032067 sectors 16418304 bytes 5 002104452 sectors 1077479424 bytes 7 004192902 sectors 2146765824 bytes 9 008401932 sectors 4301789184 bytes 11 010490382 sectors 5371075584 bytes 13 004208967 sectors 2154991104 bytes 15 027744192 sectors 14205026304 bytes</pre>
Log Highlights:	<pre>Destination setup 78177792 sectors wiped with 7E Comparison of original to clone Partition Sectors compared: 8401932 Sectors match: 8401929 Sectors differ: 3 Bytes differ: 3 Diffs range: 1, 36, 8226 run start Mon May 7 14:53:14 2007 run finish Mon May 7 15:06:39 2007 elapsed time 0:13:25 Normal exit Start: 05/07/07 03:42:41PM Total Sectors: 8,401,932 Input Hash: BFF7DC64C54339DA2A9D7972C076B514</pre>

Test Case DA-14-F32 EnCase 5.05f															
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AO-12 A clone is created from an image file.</td> <td>as expected</td> </tr> <tr> <td>AO-13 Clone created using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AO-14 An unaligned clone is created.</td> <td>some sectors differ</td> </tr> <tr> <td>AO-17 Excess sectors are unchanged.</td> <td>as expected</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-03 Execution environment is XE.	as expected	AO-12 A clone is created from an image file.	as expected	AO-13 Clone created using interface AI.	as expected	AO-14 An unaligned clone is created.	some sectors differ	AO-17 Excess sectors are unchanged.	as expected	AO-23 Logged information is correct.	as expected
Assertion & Expected Result	Actual Result														
AM-03 Execution environment is XE.	as expected														
AO-12 A clone is created from an image file.	as expected														
AO-13 Clone created using interface AI.	as expected														
AO-14 An unaligned clone is created.	some sectors differ														
AO-17 Excess sectors are unchanged.	as expected														
AO-23 Logged information is correct.	as expected														
Analysis:	Expected results not achieved														

5.2.36 DA-14-F32-ALT

Test Case DA-14-F32-ALT EnCase 5.05f	
Case Summary:	DA-14 Create an unaligned clone from an image file.
Assertions:	<p>AM-03 The tool executes in execution environment XE.</p> <p>AO-12 If requested, a clone is created from an image file.</p> <p>AO-13 A clone is created using access interface DST-AI to write to the clone device.</p> <p>AO-14 If an unaligned clone is created, each sector written to the clone is accurately written to the same disk address on the clone that the sector occupied on the digital source.</p> <p>AO-17 If requested, any excess sectors on a clone destination device are not modified.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p>
Tester Name:	slm
Test Host:	joe
Test Date:	Mon May 7 16:14:26 2007
Drives:	src(01-ide) dst (7e) other (ntfs)
Source Setup:	<pre>src hash (SHA1): < A48BB5665D6DC57C22DB68E2F723DA9AA8DF82B9 > src hash (MD5): < F458F673894753FA6A0EC8B8EC63848E > 78165360 total sectors (40020664320 bytes) Model (0BB-00JHC0) serial # (WD-WMAMC74171) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057175335 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 004208967 1023/001/01 1023/254/63 82 Linux swap 14 x 029431080 027744255 1023/000/01 1023/254/63 05 extended 15 S 000000063 027744192 1023/001/01 1023/254/63 07 NTFS 16 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 020980827 sectors 10742183424 bytes 3 000032067 sectors 16418304 bytes 5 002104452 sectors 1077479424 bytes 7 004192902 sectors 2146765824 bytes 9 008401932 sectors 4301789184 bytes 11 010490382 sectors 5371075584 bytes 13 004208967 sectors 2154991104 bytes 15 027744192 sectors 14205026304 bytes</pre>
Log Highlights:	<pre>Destination setup 78177792 sectors wiped with 7E Comparison of original to clone Partition Sectors compared: 8401932 Sectors match: 8401932 Sectors differ: 0 Bytes differ: 0 Diffs range: run start Tue May 8 13:51:30 2007 run finish Tue May 8 14:22:25 2007 elapsed time 0:30:55 Normal exit Start: 05/08/07 12:37:51PM Total Sectors: 8,401,932 Input Hash: BFF7DC64C54339DA2A9D7972C076B514</pre>

Test Case DA-14-F32-ALT EnCase 5.05f															
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AO-12 A clone is created from an image file.</td> <td>as expected</td> </tr> <tr> <td>AO-13 Clone created using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AO-14 An unaligned clone is created.</td> <td>as expected</td> </tr> <tr> <td>AO-17 Excess sectors are unchanged.</td> <td>as expected</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-03 Execution environment is XE.	as expected	AO-12 A clone is created from an image file.	as expected	AO-13 Clone created using interface AI.	as expected	AO-14 An unaligned clone is created.	as expected	AO-17 Excess sectors are unchanged.	as expected	AO-23 Logged information is correct.	as expected
Assertion & Expected Result	Actual Result														
AM-03 Execution environment is XE.	as expected														
AO-12 A clone is created from an image file.	as expected														
AO-13 Clone created using interface AI.	as expected														
AO-14 An unaligned clone is created.	as expected														
AO-17 Excess sectors are unchanged.	as expected														
AO-23 Logged information is correct.	as expected														
Analysis:	Expected results achieved														

5.2.37 DA-14-F32X

Test Case DA-14-F32X EnCase 5.05f	
Case Summary:	DA-14 Create an unaligned clone from an image file.
Assertions:	<p>AM-03 The tool executes in execution environment XE.</p> <p>AO-12 If requested, a clone is created from an image file.</p> <p>AO-13 A clone is created using access interface DST-AI to write to the clone device.</p> <p>AO-14 If an unaligned clone is created, each sector written to the clone is accurately written to the same disk address on the clone that the sector occupied on the digital source.</p> <p>AO-17 If requested, any excess sectors on a clone destination device are not modified.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p>
Tester Name:	slm
Test Host:	joe
Test Date:	Wed Apr 25 16:08:34 2007
Drives:	src(43) dst (7c) other (fat32)
Source Setup:	<pre>src hash (SHA1): < 888E2E7F7AD237DC7A732281DD93F325065E5871 > src hash (MD5): < BC39C3F7EE7A50E77B9BA1E65A5AEEF7 > 78125000 total sectors (4000000000 bytes) Model (0BB-75JHC0) serial # (WD-WMAMC46588) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057143205 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 004208967 1023/001/01 1023/254/63 82 Linux swap 14 x 029431080 027712125 1023/000/01 1023/254/63 05 extended 15 S 000000063 027712062 1023/001/01 1023/254/63 07 NTFS 16 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 020980827 sectors 10742183424 bytes 3 000032067 sectors 16418304 bytes 5 002104452 sectors 1077479424 bytes 7 004192902 sectors 2146765824 bytes 9 008401932 sectors 4301789184 bytes 11 010490382 sectors 5371075584 bytes 13 004208967 sectors 2154991104 bytes 15 027712062 sectors 14188575744 bytes</pre>
Log Highlights:	<pre>Destination setup 78177792 sectors wiped with 7C Comparison of original to clone Partition Sectors compared: 20980827 Sectors match: 20980824 Sectors differ: 3 Bytes differ: 3 Diffs range: 1, 32, 10268 Source (20980827) has 1558305 fewer sectors than destination (22539132) Zero fill: 0 Src Byte fill (43): 0 Dst Byte fill (7C): 1558305 Other fill: 0 Other no fill: 0 Zero fill range: Src fill range:</pre>

Test Case DA-14-F32X EnCase 5.05f															
	Dst fill range: 20980827-22539131 Other fill range: Other not filled range: run start Thu Apr 26 15:13:48 2007 run finish Thu Apr 26 15:46:43 2007 elapsed time 0:32:55 Normal exit Start: 04/26/07 03:55:36PM Total Sectors: 22,539,132 Input Hash: 5980CB0FA68E9862C65765DF50F00906														
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AO-12 A clone is created from an image file.</td> <td>as expected</td> </tr> <tr> <td>AO-13 Clone created using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AO-14 An unaligned clone is created.</td> <td>some sectors differ</td> </tr> <tr> <td>AO-17 Excess sectors are unchanged.</td> <td>as expected</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-03 Execution environment is XE.	as expected	AO-12 A clone is created from an image file.	as expected	AO-13 Clone created using interface AI.	as expected	AO-14 An unaligned clone is created.	some sectors differ	AO-17 Excess sectors are unchanged.	as expected	AO-23 Logged information is correct.	as expected
Assertion & Expected Result	Actual Result														
AM-03 Execution environment is XE.	as expected														
AO-12 A clone is created from an image file.	as expected														
AO-13 Clone created using interface AI.	as expected														
AO-14 An unaligned clone is created.	some sectors differ														
AO-17 Excess sectors are unchanged.	as expected														
AO-23 Logged information is correct.	as expected														
Analysis:	Expected results not achieved														

5.2.38 DA-14-F32X-ALT

Test Case DA-14-F32X-ALT EnCase 5.05f	
Case Summary:	DA-14 Create an unaligned clone from an image file.
Assertions:	<p>AM-03 The tool executes in execution environment XE.</p> <p>AO-12 If requested, a clone is created from an image file.</p> <p>AO-13 A clone is created using access interface DST-AI to write to the clone device.</p> <p>AO-14 If an unaligned clone is created, each sector written to the clone is accurately written to the same disk address on the clone that the sector occupied on the digital source.</p> <p>AO-17 If requested, any excess sectors on a clone destination device are not modified.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p>
Tester Name:	slm
Test Host:	joe
Test Date:	Fri Apr 27 10:26:04 2007
Drives:	src(43) dst (7c) other (fat32)
Source Setup:	<pre>src hash (SHA1): < 888E2E7F7AD237DC7A732281DD93F325065E5871 > src hash (MD5): < BC39C3F7EE7A50E77B9BA1E65A5AEEF7 > 78125000 total sectors (4000000000 bytes) Model (0BB-75JHC0) serial # (WD-WMAMC46588) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057143205 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 004208967 1023/001/01 1023/254/63 82 Linux swap 14 x 029431080 027712125 1023/000/01 1023/254/63 05 extended 15 S 000000063 027712062 1023/001/01 1023/254/63 07 NTFS 16 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 020980827 sectors 10742183424 bytes 3 000032067 sectors 16418304 bytes 5 002104452 sectors 1077479424 bytes 7 004192902 sectors 2146765824 bytes 9 008401932 sectors 4301789184 bytes 11 010490382 sectors 5371075584 bytes 13 004208967 sectors 2154991104 bytes 15 027712062 sectors 14188575744 bytes</pre>
Log Highlights:	<pre>Destination setup 78177792 sectors wiped with 7C Comparison of original to clone Partition Sectors compared: 20980827 Sectors match: 20980827 Sectors differ: 0 Bytes differ: 0 Diffs range: Source (20980827) has 1558305 fewer sectors than destination (22539132) Zero fill: 0 Src Byte fill (43): 0 Dst Byte fill (7C): 1558305 Other fill: 0 Other no fill: 0 Zero fill range: Src fill range:</pre>

Test Case DA-14-F32X-ALT EnCase 5.05f															
	Dst fill range: 20980827-22539131 Other fill range: Other not filled range: run start Fri Apr 27 10:31:31 2007 run finish Fri Apr 27 11:03:56 2007 elapsed time 0:32:25 Normal exit Start: 04/27/07 11:03:14AM Total Sectors: 22,539,132 Input Hash: 5980CB0FA68E9862C65765DF50F00906														
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AO-12 A clone is created from an image file.</td> <td>as expected</td> </tr> <tr> <td>AO-13 Clone created using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AO-14 An unaligned clone is created.</td> <td>as expected</td> </tr> <tr> <td>AO-17 Excess sectors are unchanged.</td> <td>as expected</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-03 Execution environment is XE.	as expected	AO-12 A clone is created from an image file.	as expected	AO-13 Clone created using interface AI.	as expected	AO-14 An unaligned clone is created.	as expected	AO-17 Excess sectors are unchanged.	as expected	AO-23 Logged information is correct.	as expected
Assertion & Expected Result	Actual Result														
AM-03 Execution environment is XE.	as expected														
AO-12 A clone is created from an image file.	as expected														
AO-13 Clone created using interface AI.	as expected														
AO-14 An unaligned clone is created.	as expected														
AO-17 Excess sectors are unchanged.	as expected														
AO-23 Logged information is correct.	as expected														
Analysis:	Expected results achieved														

5.2.39 DA-14-FLOPPY

Test Case DA-14-FLOPPY EnCase 5.05f															
Case Summary:	DA-14 Create an unaligned clone from an image file.														
Assertions:	<p>AM-03 The tool executes in execution environment XE.</p> <p>AO-12 If requested, a clone is created from an image file.</p> <p>AO-13 A clone is created using access interface DST-AI to write to the clone device.</p> <p>AO-14 If an unaligned clone is created, each sector written to the clone is accurately written to the same disk address on the clone that the sector occupied on the digital source.</p> <p>AO-17 If requested, any excess sectors on a clone destination device are not modified.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p>														
Tester Name:	slm														
Test Host:	joe														
Test Date:	Thu Apr 19 17:27:40 2007														
Drives:	src(floppy) dst (floppy) other (fat32)														
Source Setup:	<p>src hash (SHA1): < e2863334ac7eaabc7c8a0d62eb0d3b3af29f2c40 ></p> <p>src hash (MD5): < 17f6a5925be2f38eedaf435ff8b6a6f4 ></p> <p>Floppy disk</p>														
Log Highlights:	<p>Destination setup</p> <p>2880 sectors wiped with 1</p> <p>Comparison of original to clone Drive</p> <p>Start: 04/19/07 06:36:50PM</p> <p>Total Sectors: 2,880</p> <p>Input Hash: 17F6A5925BE2F38EEDAF435FF8B6A6F4</p>														
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AO-12 A clone is created from an image file.</td> <td>as expected</td> </tr> <tr> <td>AO-13 Clone created using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AO-14 An unaligned clone is created.</td> <td>as expected</td> </tr> <tr> <td>AO-17 Excess sectors are unchanged.</td> <td>as expected</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-03 Execution environment is XE.	as expected	AO-12 A clone is created from an image file.	as expected	AO-13 Clone created using interface AI.	as expected	AO-14 An unaligned clone is created.	as expected	AO-17 Excess sectors are unchanged.	as expected	AO-23 Logged information is correct.	as expected
Assertion & Expected Result	Actual Result														
AM-03 Execution environment is XE.	as expected														
AO-12 A clone is created from an image file.	as expected														
AO-13 Clone created using interface AI.	as expected														
AO-14 An unaligned clone is created.	as expected														
AO-17 Excess sectors are unchanged.	as expected														
AO-23 Logged information is correct.	as expected														
Analysis:	Expected results achieved														

5.2.40 DA-14-FW

Test Case DA-14-FW EnCase 5.05f	
Case Summary:	DA-14 Create an unaligned clone from an image file.
Assertions:	<p>AM-03 The tool executes in execution environment XE.</p> <p>AO-12 If requested, a clone is created from an image file.</p> <p>AO-13 A clone is created using access interface DST-AI to write to the clone device.</p> <p>AO-14 If an unaligned clone is created, each sector written to the clone is accurately written to the same disk address on the clone that the sector occupied on the digital source.</p> <p>AO-17 If requested, any excess sectors on a clone destination device are not modified.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p>
Tester Name:	mrmw
Test Host:	Joe
Test Date:	Tue Dec 11 15:58:29 2007
Drives:	src(01-IDE) dst (7B) other (01-FU)
Source Setup:	<pre>src hash (SHA1): < A48BB5665D6DC57C22DB68E2F723DA9AA8DF82B9 > src hash (MD5): < F458F673894753FA6A0EC8B8EC63848E > 78165360 total sectors (40020664320 bytes) Model (0BB-00JHC0) serial # (WD-WMAMC74171) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057175335 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 004208967 1023/001/01 1023/254/63 82 Linux swap 14 x 029431080 027744255 1023/000/01 1023/254/63 05 extended 15 S 000000063 027744192 1023/001/01 1023/254/63 07 NTFS 16 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 020980827 sectors 10742183424 bytes 3 000032067 sectors 16418304 bytes 5 002104452 sectors 1077479424 bytes 7 004192902 sectors 2146765824 bytes 9 008401932 sectors 4301789184 bytes 11 010490382 sectors 5371075584 bytes 13 004208967 sectors 2154991104 bytes 15 027744192 sectors 14205026304 bytes</pre>
Log Highlights:	<p>Destination setup 78177792 sectors wiped with 7B</p> <p>Comparison of original to clone Drive Sectors compared: 78165360 Sectors match: 78165360 Sectors differ: 0 Bytes differ: 0 Diffs range Source (78165360) has 12432 fewer sectors than destination (78177792) Zero fill: 0 Src Byte fill (ED): 0 Dst Byte fill (7B): 12432 Other fill: 0 Other no fill: 0 Zero fill range:</p>

Test Case DA-14-FW EnCase 5.05f															
	<p>Src fill range: Dst fill range: 78165360-78177791 Other fill range: Other not filled range: 0 source read errors, 0 destination read errors</p> <p>Start: 12/11/07 05:15:28PM Total Sectors: 78,177,792 Input Hash: F458F673894753FA6A0EC8B8EC63848E Actual Date:12/06/07 12:53:47PM File Integrity:Completely Verified, 0 Errors Acquisition Hash:f458f673894753fa6a0ec8b8ec63848e Verify Hash:f458f673894753fa6a0ec8b8ec63848e EnCase Version:5.05f System Version:Windows XP Error Granularity:64 Read Errors:0 Missing Sector Errors:0 CRC Errors:0 Total Size:40,020,664,320 bytes (37.3GB) Total Sectors:78,165,360 Settings: fill none</p>														
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AO-12 A clone is created from an image file.</td> <td>as expected</td> </tr> <tr> <td>AO-13 Clone created using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AO-14 An unaligned clone is created.</td> <td>as expected</td> </tr> <tr> <td>AO-17 Excess sectors are unchanged.</td> <td>as expected</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-03 Execution environment is XE.	as expected	AO-12 A clone is created from an image file.	as expected	AO-13 Clone created using interface AI.	as expected	AO-14 An unaligned clone is created.	as expected	AO-17 Excess sectors are unchanged.	as expected	AO-23 Logged information is correct.	as expected
Assertion & Expected Result	Actual Result														
AM-03 Execution environment is XE.	as expected														
AO-12 A clone is created from an image file.	as expected														
AO-13 Clone created using interface AI.	as expected														
AO-14 An unaligned clone is created.	as expected														
AO-17 Excess sectors are unchanged.	as expected														
AO-23 Logged information is correct.	as expected														
Analysis:	Expected results achieved														

5.2.41 DA-14-HOT

Test Case DA-14-HOT EnCase 5.05f															
Case Summary:	DA-14 Create an unaligned clone from an image file.														
Assertions:	<p>AM-03 The tool executes in execution environment XE.</p> <p>AO-12 If requested, a clone is created from an image file.</p> <p>AO-13 A clone is created using access interface DST-AI to write to the clone device.</p> <p>AO-14 If an unaligned clone is created, each sector written to the clone is accurately written to the same disk address on the clone that the sector occupied on the digital source.</p> <p>AO-17 If requested, any excess sectors on a clone destination device are not modified.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p>														
Tester Name:	mrmw														
Test Host:	Frank														
Test Date:	Wed Jun 13 11:05:41 2007														
Drives:	src(2A) dst (2E) other (01-FU and 01-FU)														
Source Setup:	<pre>src hash (SHA256): < AE8E839101661367D92803D5F5D408268635EFD8A05FEA633838CDC3919F5ABA > src hash (SHA1): < F5F9F2903DCAB895F36E270FB22A722E27918125 > src hash (MD5): < 91E0AC905F682ECF6DE4E9835089B519 > 17783249 total sectors (9105023488 bytes) Model (QM39100TD-SCA) serial # (PCB=20-116711-06 HDAQM39100TD-SCA) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 017751762 0000/001/01 1023/254/63 Boot 07 NTFS 2 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 3 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 4 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 017751762 sectors 9088902144 bytes</pre>														
Log Highlights:	<p>Destination setup 17783249 sectors wiped with 2E</p> <p>Comparison of original to clone Drive Sectors compared: 17783249 Sectors match: 17783249 Sectors differ: 0 Bytes differ: 0 Diffs range 0 source read errors, 0 destination read errors</p> <p>Actual Date:06/13/07 10:26:15AM File Integrity:Completely Verified, 0 Errors Acquisition Hash:91e0ac905f682ecf6de4e9835089b519 Verify Hash:91e0ac905f682ecf6de4e9835089b519 EnCase Version:5.05f System Version:Windows XP Error Granularity:64 Read Errors:0 Missing Sector Errors:0 CRC Errors:0 Total Size:9,105,023,488 bytes (8.5GB) Total Sectors:17,783,249 Settings: fill none</p>														
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AO-12 A clone is created from an image file.</td> <td>as expected</td> </tr> <tr> <td>AO-13 Clone created using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AO-14 An unaligned clone is created.</td> <td>as expected</td> </tr> <tr> <td>AO-17 Excess sectors are unchanged.</td> <td>as expected</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-03 Execution environment is XE.	as expected	AO-12 A clone is created from an image file.	as expected	AO-13 Clone created using interface AI.	as expected	AO-14 An unaligned clone is created.	as expected	AO-17 Excess sectors are unchanged.	as expected	AO-23 Logged information is correct.	as expected
Assertion & Expected Result	Actual Result														
AM-03 Execution environment is XE.	as expected														
AO-12 A clone is created from an image file.	as expected														
AO-13 Clone created using interface AI.	as expected														
AO-14 An unaligned clone is created.	as expected														
AO-17 Excess sectors are unchanged.	as expected														
AO-23 Logged information is correct.	as expected														

Test Case DA-14-HOT EnCase 5.05f	
Analysis:	Expected results achieved

5.2.42 DA-14-NTFS

Test Case DA-14-NTFS EnCase 5.05f	
Case Summary:	DA-14 Create an unaligned clone from an image file.
Assertions:	<p>AM-03 The tool executes in execution environment XE.</p> <p>AO-12 If requested, a clone is created from an image file.</p> <p>AO-13 A clone is created using access interface DST-AI to write to the clone device.</p> <p>AO-14 If an unaligned clone is created, each sector written to the clone is accurately written to the same disk address on the clone that the sector occupied on the digital source.</p> <p>AO-17 If requested, any excess sectors on a clone destination device are not modified.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p>
Tester Name:	mrmw
Test Host:	Max
Test Date:	Tue Jul 3 07:19:08 2007
Drives:	src(01) dst (03) other (01-FU)
Source Setup:	<pre>src hash (SHA1): < A48BB5665D6DC57C22DB68E2F723DA9AA8DF82B9 > src hash (MD5): < F458F673894753FA6A0EC8B8EC63848E > 78165360 total sectors (40020664320 bytes) Model (0BB-00JHC0) serial # (WD-WMAMC74171) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057175335 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 004208967 1023/001/01 1023/254/63 82 Linux swap 14 x 029431080 027744255 1023/000/01 1023/254/63 05 extended 15 S 000000063 027744192 1023/001/01 1023/254/63 07 NTFS 16 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 020980827 sectors 10742183424 bytes 3 000032067 sectors 16418304 bytes 5 002104452 sectors 1077479424 bytes 7 004192902 sectors 2146765824 bytes 9 008401932 sectors 4301789184 bytes 11 010490382 sectors 5371075584 bytes 13 004208967 sectors 2154991104 bytes 15 027744192 sectors 14205026304 bytes Excess destination partition sectors hash: CMD: /usr/bin/machash.csh da-14-ntfs Max mrmw /dev/sdb5 03 -before -winsize 7102513152 -new_log SHA1 0 - 7102513151 = BFE8B2ACB8D7233BAFF31527F2D58D5301738656 SHA1 7102513152 - 14205026303 = 9FFDA7EE0AAB3EC807035BEBF2EEE7CB6564DD74</pre>
Log Highlights:	<pre>Comparision of original to clone Partition Sectors compared: 27744192 Sectors match: 27744152 Sectors differ: 40 Bytes differ: 4434 Diffs range: 6160368-6160399, 27744184-27744191 run start Tue Jul 3 11:28:38 2007 run finish Tue Jul 3 11:54:46 2007 elapsed time 0:26:8 Normal exit Start: 07/03/07 10:44:07PM</pre>

Test Case DA-14-NTFS EnCase 5.05f															
	Total Sectors: 27,744,191 Input Hash: 494A6ED8A827AD9B5403E0CC89379956 Write Block: 44 FastBloc2 FE														
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AO-12 A clone is created from an image file.</td> <td>as expected</td> </tr> <tr> <td>AO-13 Clone created using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AO-14 An unaligned clone is created.</td> <td>some sectors differ</td> </tr> <tr> <td>AO-17 Excess sectors are unchanged.</td> <td>as expected</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-03 Execution environment is XE.	as expected	AO-12 A clone is created from an image file.	as expected	AO-13 Clone created using interface AI.	as expected	AO-14 An unaligned clone is created.	some sectors differ	AO-17 Excess sectors are unchanged.	as expected	AO-23 Logged information is correct.	as expected
Assertion & Expected Result	Actual Result														
AM-03 Execution environment is XE.	as expected														
AO-12 A clone is created from an image file.	as expected														
AO-13 Clone created using interface AI.	as expected														
AO-14 An unaligned clone is created.	some sectors differ														
AO-17 Excess sectors are unchanged.	as expected														
AO-23 Logged information is correct.	as expected														
Analysis:	Expected results not achieved														

5.2.43 DA-14-NTFS-ALT

Test Case DA-14-NTFS-ALT EnCase 5.05f	
Case Summary:	DA-14 Create an unaligned clone from an image file.
Assertions:	<p>AM-03 The tool executes in execution environment XE.</p> <p>AO-12 If requested, a clone is created from an image file.</p> <p>AO-13 A clone is created using access interface DST-AI to write to the clone device.</p> <p>AO-14 If an unaligned clone is created, each sector written to the clone is accurately written to the same disk address on the clone that the sector occupied on the digital source.</p> <p>AO-17 If requested, any excess sectors on a clone destination device are not modified.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p>
Tester Name:	mrmw
Test Host:	Max
Test Date:	Tue Jul 3 07:22:01 2007
Drives:	src(01) dst (03) other (01-FU)
Source Setup:	<pre>src hash (SHA1): < A48BB5665D6DC57C22DB68E2F723DA9AA8DF82B9 > src hash (MD5): < F458F673894753FA6A0EC8B8EC63848E > 78165360 total sectors (40020664320 bytes) Model (0BB-00JHC0) serial # (WD-WMAMC74171) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057175335 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 004208967 1023/001/01 1023/254/63 82 Linux swap 14 x 029431080 027744255 1023/000/01 1023/254/63 05 extended 15 S 000000063 027744192 1023/001/01 1023/254/63 07 NTFS 16 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 020980827 sectors 10742183424 bytes 3 000032067 sectors 16418304 bytes 5 002104452 sectors 1077479424 bytes 7 004192902 sectors 2146765824 bytes 9 008401932 sectors 4301789184 bytes 11 010490382 sectors 5371075584 bytes 13 004208967 sectors 2154991104 bytes 15 027744192 sectors 14205026304 bytes Excess destination partition sectors hash: CMD: /usr/bin/machash.csh da-14-ntfs-alt Max mrmw /dev/hdb6 03 -before - winsize 7102513152 -new_log SHA1 0 - 7102513151 = 14FABA484DFB46EF7251C044E8822F99EDE1C3B1 SHA1 7102513152 - 14205026303 = 7EB5317D6308FB2C86BE79E0582192459DB9137A</pre>
Log Highlights:	<pre>Comparision of original to clone Partition Sectors compared: 27744192 Sectors match: 27744184 Sectors differ: 8 Bytes differ: 3501 Diffs range: 27744184-27744191 run start Tue Jul 3 09:47:23 2007 run finish Tue Jul 3 10:13:35 2007 elapsed time 0:26:12 Normal exit Start: 07/03/07 09:23:45AM</pre>

Test Case DA-14-NTFS-ALT EnCase 5.05f															
	Total Sectors: 27,744,191 Input Hash: 494A6ED8A827AD9B5403E0CC89379956 Write Block: 44 FastBloc2 FE														
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AO-12 A clone is created from an image file.</td> <td>as expected</td> </tr> <tr> <td>AO-13 Clone created using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AO-14 An unaligned clone is created.</td> <td>as expected</td> </tr> <tr> <td>AO-17 Excess sectors are unchanged.</td> <td>as expected</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-03 Execution environment is XE.	as expected	AO-12 A clone is created from an image file.	as expected	AO-13 Clone created using interface AI.	as expected	AO-14 An unaligned clone is created.	as expected	AO-17 Excess sectors are unchanged.	as expected	AO-23 Logged information is correct.	as expected
Assertion & Expected Result	Actual Result														
AM-03 Execution environment is XE.	as expected														
AO-12 A clone is created from an image file.	as expected														
AO-13 Clone created using interface AI.	as expected														
AO-14 An unaligned clone is created.	as expected														
AO-17 Excess sectors are unchanged.	as expected														
AO-23 Logged information is correct.	as expected														
Analysis:	Expected results achieved														

5.2.44 DA-14-PASSWORD

Test Case DA-14-PASSWORD EnCase 5.05f	
Case Summary:	DA-14 Create an unaligned clone from an image file.
Assertions:	<p>AM-03 The tool executes in execution environment XE.</p> <p>AO-12 If requested, a clone is created from an image file.</p> <p>AO-13 A clone is created using access interface DST-AI to write to the clone device.</p> <p>AO-14 If an unaligned clone is created, each sector written to the clone is accurately written to the same disk address on the clone that the sector occupied on the digital source.</p> <p>AO-17 If requested, any excess sectors on a clone destination device are not modified.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p>
Tester Name:	mrmw
Test Host:	Frank
Test Date:	Fri Jun 22 07:00:33 2007
Drives:	src(43) dst (85) other (02-fu)
Source Setup:	<pre> src hash (SHA1): < 888E2E7F7AD237DC7A732281DD93F325065E5871 > src hash (MD5): < BC39C3F7EE7A50E77B9BA1E65A5AEEF7 > 78125000 total sectors (4000000000 bytes) Model (0BB-75JHC0) serial # (WD-WMAMC46588) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057143205 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 004208967 1023/001/01 1023/254/63 82 Linux swap 14 x 029431080 027712125 1023/000/01 1023/254/63 05 extended 15 S 000000063 027712062 1023/001/01 1023/254/63 07 NTFS 16 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 020980827 sectors 10742183424 bytes 3 000032067 sectors 16418304 bytes 5 002104452 sectors 1077479424 bytes 7 004192902 sectors 2146765824 bytes 9 008401932 sectors 4301789184 bytes 11 010490382 sectors 5371075584 bytes 13 004208967 sectors 2154991104 bytes 15 027712062 sectors 14188575744 bytes </pre>
Log Highlights:	<p>Destination setup 156301488 sectors wiped with 85</p> <p>Comparison of original to clone Drive Sectors compared: 78125000 Sectors match: 78125000 Sectors differ: 0 Bytes differ: 0 Diffs range Source (78125000) has 78176488 fewer sectors than destination (156301488) Zero fill: 0 Src Byte fill (43): 0 Dst Byte fill (85): 78176488 Other fill: 0 Other no fill: 0 Zero fill range:</p>

Test Case DA-14-PASSWORD EnCase 5.05f															
	<p>Src fill range: Dst fill range: 78125000-156301487 Other fill range: Other not filled range: 0 source read errors, 0 destination read errors</p> <p>Start: 06/22/07 07:10:54AM Total Sectors: 156,301,488 Input Hash: BC39C3F7EE7A50E77B9BA1E65A5AEEF7 Actual Date:06/13/07 07:28:22AM File Integrity:Completely Verified, 0 Errors Acquisition Hash:bc39c3f7ee7a50e77b9bale65a5aeef7 Verify Hash:bc39c3f7ee7a50e77b9bale65a5aeef7 EnCase Version:5.05f System Version:Windows XP Error Granularity:64 Read Errors:0 Missing Sector Errors:0 CRC Errors:0 Total Size:40,000,000,000 bytes (37.3GB) Total Sectors:78,125,000 Settings: fill none</p>														
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AO-12 A clone is created from an image file.</td> <td>as expected</td> </tr> <tr> <td>AO-13 Clone created using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AO-14 An unaligned clone is created.</td> <td>as expected</td> </tr> <tr> <td>AO-17 Excess sectors are unchanged.</td> <td>as expected</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-03 Execution environment is XE.	as expected	AO-12 A clone is created from an image file.	as expected	AO-13 Clone created using interface AI.	as expected	AO-14 An unaligned clone is created.	as expected	AO-17 Excess sectors are unchanged.	as expected	AO-23 Logged information is correct.	as expected
Assertion & Expected Result	Actual Result														
AM-03 Execution environment is XE.	as expected														
AO-12 A clone is created from an image file.	as expected														
AO-13 Clone created using interface AI.	as expected														
AO-14 An unaligned clone is created.	as expected														
AO-17 Excess sectors are unchanged.	as expected														
AO-23 Logged information is correct.	as expected														
Analysis:	Expected results achieved														

5.2.45 DA-14-SCSI

Test Case DA-14-SCSI EnCase 5.05f											
Case Summary:	DA-14 Create an unaligned clone from an image file.										
Assertions:	<p>AM-03 The tool executes in execution environment XE.</p> <p>AO-12 If requested, a clone is created from an image file.</p> <p>AO-13 A clone is created using access interface DST-AI to write to the clone device.</p> <p>AO-14 If an unaligned clone is created, each sector written to the clone is accurately written to the same disk address on the clone that the sector occupied on the digital source.</p> <p>AO-17 If requested, any excess sectors on a clone destination device are not modified.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p>										
Tester Name:	mrmw										
Test Host:	Freddy										
Test Date:	Fri Nov 30 13:01:10 2007										
Drives:	src(2A) dst (2E) other (06-FU)										
Source Setup:	<pre>src hash (SHA256): < AE8E839101661367D92803D5F5D408268635EFD8A05FEA633838CDC3919F5ABA > src hash (SHA1): < F5F9F2903DCAB895F36E270FB22A722E27918125 > src hash (MD5): < 91E0AC905F682ECF6DE4E9835089B519 > 17783249 total sectors (9105023488 bytes) Model (QM39100TD-SCA) serial # (PCB=20-116711-06 HDAQM39100TD-SCA) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 017751762 0000/001/01 1023/254/63 Boot 07 NTFS 2 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 3 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 4 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 017751762 sectors 9088902144 bytes</pre>										
Log Highlights:	<p>Destination setup 17783249 sectors wiped with 2A</p> <p>Comparison of original to clone Drive Sectors compared: 17783249 Sectors match: 17783249 Sectors differ: 0 Bytes differ: 0 Diffs range 0 source read errors, 0 destination read errors</p> <p>Start: 11/30/07 01:37:24PM Total Sectors: 17,783,249 Input Hash: 91E0AC905F682ECF6DE4E9835089B519 Actual Date:11/30/07 11:34:50AM File Integrity:Completely Verified, 0 Errors Acquisition Hash:91e0ac905f682ecf6de4e9835089b519 Verify Hash:91e0ac905f682ecf6de4e9835089b519 EnCase Version:5.05f System Version:Windows XP Error Granularity:64 Read Errors:0 Missing Sector Errors:0 CRC Errors:0 Total Size:9,105,023,488 bytes (8.5GB) Total Sectors:17,783,249 Settings: fill none</p>										
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AO-12 A clone is created from an image file.</td> <td>as expected</td> </tr> <tr> <td>AO-13 Clone created using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AO-14 An unaligned clone is created.</td> <td>as expected</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-03 Execution environment is XE.	as expected	AO-12 A clone is created from an image file.	as expected	AO-13 Clone created using interface AI.	as expected	AO-14 An unaligned clone is created.	as expected
Assertion & Expected Result	Actual Result										
AM-03 Execution environment is XE.	as expected										
AO-12 A clone is created from an image file.	as expected										
AO-13 Clone created using interface AI.	as expected										
AO-14 An unaligned clone is created.	as expected										

Test Case DA-14-SCSI EnCase 5.05f		
	AO-17 Excess sectors are unchanged.	as expected
	AO-23 Logged information is correct.	as expected
Analysis:	Expected results achieved	

5.2.46 DA-14-THUMB

Test Case DA-14-THUMB EnCase 5.05f															
Case Summary:	DA-14 Create an unaligned clone from an image file.														
Assertions:	<p>AM-03 The tool executes in execution environment XE.</p> <p>AO-12 If requested, a clone is created from an image file.</p> <p>AO-13 A clone is created using access interface DST-AI to write to the clone device.</p> <p>AO-14 If an unaligned clone is created, each sector written to the clone is accurately written to the same disk address on the clone that the sector occupied on the digital source.</p> <p>AO-17 If requested, any excess sectors on a clone destination device are not modified.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p>														
Tester Name:	slm														
Test Host:	joe														
Test Date:	Mon Apr 23 13:03:39 2007														
Drives:	src(d5-thumb) dst (d7-thumb) other (-new_log)														
Source Setup:	<pre>src hash (SHA1): < D68520EF74A336E49DCCF83815B7B08FDC53E38A > src hash (MD5): < C843593624B2B3B878596D8760B19954 > 505856 total sectors (258998272 bytes) Model (usb2.0Flash Disk) serial # () N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 778135908 1141509631 0357/116/40 0357/032/45 Boot 72 other 2 P 168689522 1936028240 0288/115/43 0367/114/50 Boot 65 other 3 P 1869881465 1936028192 0366/032/33 0357/032/43 Boot 79 other 4 P 2885681152 000055499 0372/097/50 0000/010/00 Boot 0D other 1 1141509631 sectors 584452931072 bytes 2 1936028240 sectors 991246458880 bytes 3 1936028192 sectors 991246434304 bytes 4 000055499 sectors 28415488 bytes</pre>														
Log Highlights:	<pre>Destination setup 4001760 sectors wiped with D7 Comparision of original to clone Drive Sectors compared: 505856 Sectors match: 505856 Sectors differ: 0 Bytes differ: 0 Diffs range Source (505856) has 3495904 fewer sectors than destination (4001760) Zero fill: 0 Src Byte fill (D5): 0 Dst Byte fill (D7): 3495904 Other fill: 0 Other no fill: 0 Zero fill range: Src fill range: Dst fill range: 505856-4001759 Other fill range: Other not filled range: 0 source read errors, 0 destination read errors Start: 04/23/07 02:23:07PM Total Sectors: 4,001,760 Input Hash: C843593624B2B3B878596D8760B19954</pre>														
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AO-12 A clone is created from an image file.</td> <td>as expected</td> </tr> <tr> <td>AO-13 Clone created using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AO-14 An unaligned clone is created.</td> <td>as expected</td> </tr> <tr> <td>AO-17 Excess sectors are unchanged.</td> <td>as expected</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-03 Execution environment is XE.	as expected	AO-12 A clone is created from an image file.	as expected	AO-13 Clone created using interface AI.	as expected	AO-14 An unaligned clone is created.	as expected	AO-17 Excess sectors are unchanged.	as expected	AO-23 Logged information is correct.	as expected
Assertion & Expected Result	Actual Result														
AM-03 Execution environment is XE.	as expected														
AO-12 A clone is created from an image file.	as expected														
AO-13 Clone created using interface AI.	as expected														
AO-14 An unaligned clone is created.	as expected														
AO-17 Excess sectors are unchanged.	as expected														
AO-23 Logged information is correct.	as expected														

Test Case DA-14-THUMB EnCase 5.05f	
Analysis:	Expected results achieved

5.2.47 DA-14-UNCOMPRESSED

Test Case DA-14-UNCOMPRESSED EnCase 5.05f	
Case Summary:	DA-14 Create an unaligned clone from an image file.
Assertions:	<p>AM-03 The tool executes in execution environment XE.</p> <p>AO-12 If requested, a clone is created from an image file.</p> <p>AO-13 A clone is created using access interface DST-AI to write to the clone device.</p> <p>AO-14 If an unaligned clone is created, each sector written to the clone is accurately written to the same disk address on the clone that the sector occupied on the digital source.</p> <p>AO-17 If requested, any excess sectors on a clone destination device are not modified.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p>
Tester Name:	mrmw
Test Host:	Freddy
Test Date:	Fri Nov 30 17:01:26 2007
Drives:	src(43) dst (7C) other (06-FU)
Source Setup:	<pre> src hash (SHA1): < 888E2E7F7AD237DC7A732281DD93F325065E5871 > src hash (MD5): < BC39C3F7EE7A50E77B9BA1E65A5AEEF7 > 78125000 total sectors (4000000000 bytes) Model (0BB-75JHC0) serial # (WD-WMAMC46588) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057143205 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 004208967 1023/001/01 1023/254/63 82 Linux swap 14 x 029431080 027712125 1023/000/01 1023/254/63 05 extended 15 S 000000063 027712062 1023/001/01 1023/254/63 07 NTFS 16 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 020980827 sectors 10742183424 bytes 3 000032067 sectors 16418304 bytes 5 002104452 sectors 1077479424 bytes 7 004192902 sectors 2146765824 bytes 9 008401932 sectors 4301789184 bytes 11 010490382 sectors 5371075584 bytes 13 004208967 sectors 2154991104 bytes 15 027712062 sectors 14188575744 bytes </pre>
Log Highlights:	<p>Destination setup</p> <p>78177792 sectors wiped with 7C</p> <p>Comparison of original to clone Drive</p> <p>Sectors compared: 78125000</p> <p>Sectors match: 78125000</p> <p>Sectors differ: 0</p> <p>Bytes differ: 0</p> <p>Diffs range</p> <p>Source (78125000) has 52792 fewer sectors than destination (78177792)</p> <p>Zero fill: 0</p> <p>Src Byte fill (43): 0</p> <p>Dst Byte fill (7C): 52792</p> <p>Other fill: 0</p> <p>Other no fill: 0</p> <p>Zero fill range:</p>

Test Case DA-14-UNCOMPRESSED EnCase 5.05f															
	<p>Src fill range: Dst fill range: 78125000-78177791 Other fill range: Other not filled range: 0 source read errors, 0 destination read errors</p> <p>Start: 12/03/07 06:53:12AM Total Sectors: 78,177,792 Input Hash: BC39C3F7EE7A50E77B9BA1E65A5AEF7 Actual Date:11/30/07 04:30:48PM Acquisition Hash:bc39c3f7ee7a50e77b9bale65a5aeef7 EnCase Version:5.05f System Version:Windows 2003 Server Error Granularity:64 Read Errors:0 Missing Sector Errors:0 CRC Errors:0 Total Size:40,000,000,000 bytes (37.3GB) Total Sectors:78,125,000 Settings: fill none</p>														
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AO-12 A clone is created from an image file.</td> <td>as expected</td> </tr> <tr> <td>AO-13 Clone created using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AO-14 An unaligned clone is created.</td> <td>as expected</td> </tr> <tr> <td>AO-17 Excess sectors are unchanged.</td> <td>as expected</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-03 Execution environment is XE.	as expected	AO-12 A clone is created from an image file.	as expected	AO-13 Clone created using interface AI.	as expected	AO-14 An unaligned clone is created.	as expected	AO-17 Excess sectors are unchanged.	as expected	AO-23 Logged information is correct.	as expected
Assertion & Expected Result	Actual Result														
AM-03 Execution environment is XE.	as expected														
AO-12 A clone is created from an image file.	as expected														
AO-13 Clone created using interface AI.	as expected														
AO-14 An unaligned clone is created.	as expected														
AO-17 Excess sectors are unchanged.	as expected														
AO-23 Logged information is correct.	as expected														
Analysis:	Expected results achieved														

5.2.48 DA-14-USB

Test Case DA-14-USB EnCase 5.05f	
Case Summary:	DA-14 Create an unaligned clone from an image file.
Assertions:	<p>AM-03 The tool executes in execution environment XE.</p> <p>AO-12 If requested, a clone is created from an image file.</p> <p>AO-13 A clone is created using access interface DST-AI to write to the clone device.</p> <p>AO-14 If an unaligned clone is created, each sector written to the clone is accurately written to the same disk address on the clone that the sector occupied on the digital source.</p> <p>AO-17 If requested, any excess sectors on a clone destination device are not modified.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p>
Tester Name:	slm
Test Host:	joe
Test Date:	Tue May 8 15:10:28 2007
Drives:	src(01-ide) dst (7e) other (none)
Source Setup:	<pre>src hash (SHA1): < A48BB5665D6DC57C22DB68E2F723DA9AA8DF82B9 > src hash (MD5): < F458F673894753FA6A0EC8B8EC63848E > 78165360 total sectors (40020664320 bytes) Model (0BB-00JHC0) serial # (WD-WMAMC74171) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057175335 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 004208967 1023/001/01 1023/254/63 82 Linux swap 14 x 029431080 027744255 1023/000/01 1023/254/63 05 extended 15 S 000000063 027744192 1023/001/01 1023/254/63 07 NTFS 16 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 020980827 sectors 10742183424 bytes 3 000032067 sectors 16418304 bytes 5 002104452 sectors 1077479424 bytes 7 004192902 sectors 2146765824 bytes 9 008401932 sectors 4301789184 bytes 11 010490382 sectors 5371075584 bytes 13 004208967 sectors 2154991104 bytes 15 027744192 sectors 14205026304 bytes</pre>
Log Highlights:	<p>Destination setup</p> <p>78177792 sectors wiped with 7E</p> <p>Comparison of original to clone Drive</p> <p>Sectors compared: 78165360</p> <p>Sectors match: 78165360</p> <p>Sectors differ: 0</p> <p>Bytes differ: 0</p> <p>Diffs range</p> <p>Source (78165360) has 12432 fewer sectors than destination (78177792)</p> <p>Zero fill: 0</p> <p>Src Byte fill (01): 0</p> <p>Dst Byte fill (7E): 12432</p> <p>Other fill: 0</p> <p>Other no fill: 0</p> <p>Zero fill range:</p>

Test Case DA-14-USB EnCase 5.05f															
	Src fill range: Dst fill range: 78165360-78177791 Other fill range: Other not filled range: 0 source read errors, 0 destination read errors Start: 05/09/07 11:16:36AM Total Sectors: 78,177,792 Input Hash: F458F673894753FA6A0EC8B8EC63848E														
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AO-12 A clone is created from an image file.</td> <td>as expected</td> </tr> <tr> <td>AO-13 Clone created using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AO-14 An unaligned clone is created.</td> <td>as expected</td> </tr> <tr> <td>AO-17 Excess sectors are unchanged.</td> <td>as expected</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-03 Execution environment is XE.	as expected	AO-12 A clone is created from an image file.	as expected	AO-13 Clone created using interface AI.	as expected	AO-14 An unaligned clone is created.	as expected	AO-17 Excess sectors are unchanged.	as expected	AO-23 Logged information is correct.	as expected
Assertion & Expected Result	Actual Result														
AM-03 Execution environment is XE.	as expected														
AO-12 A clone is created from an image file.	as expected														
AO-13 Clone created using interface AI.	as expected														
AO-14 An unaligned clone is created.	as expected														
AO-17 Excess sectors are unchanged.	as expected														
AO-23 Logged information is correct.	as expected														
Analysis:	Expected results achieved														

5.2.49 DA-17

Test Case DA-17 EnCase 5.05f											
Case Summary:	DA-17 Create a truncated clone from an image file.										
Assertions:	<p>AM-03 The tool executes in execution environment XE.</p> <p>AO-12 If requested, a clone is created from an image file.</p> <p>AO-13 A clone is created using access interface DST-AI to write to the clone device.</p> <p>AO-19 If there is insufficient space to create a complete clone, a truncated clone is created using all available sectors of the clone device.</p> <p>AO-20 If a truncated clone is created, the tool notifies the user.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p>										
Tester Name:	mrmw										
Test Host:	Freddy										
Test Date:	Wed May 23 15:04:54 2007										
Drives:	src(92) dst (65) other (02-fu)										
Source Setup:	<pre>src hash (SHA1): < 63E6F7BD3040A8ADA2CF8FBF66A805B76DF10481 > src hash (MD5): < E095DD1BD0B0DD6E603153A3FE1A2F3E > 58633344 total sectors (30020272128 bytes) 58167/015/63 (max cyl/hd values) 58168/016/63 (number of cyl/hd) IDE disk: Model (WDC WD300BB-00CAA0) serial # (WD-WMA8H2140350) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 058605057 0000/001/01 1023/254/63 Boot 07 NTFS 2 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 3 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 4 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 058605057 sectors 30005789184 bytes Hashes with DCO in place: md5:525963c6789423396fe1f3202a8cbd04 sha1.txt:55A3CFE756B7B0034DCCE71F7D7A477D8681B781</pre>										
Log Highlights:	<p>Destination setup 12594960 sectors wiped with 65</p> <p>Comparison of original to clone Drive Sectors compared: 12594960 Sectors match: 12594960 Sectors differ: 0 Bytes differ: 0 Diffs range Source (52770010) has 40175050 more sectors than destination (12594960) 0 source read errors, 0 destination read errors</p> <p>Actual Date:05/23/07 03:54:07PM File Integrity:Completely Verified, 0 Errors Acquisition Hash:525963c6789423396fe1f3202a8cbd04 Verify Hash:525963c6789423396fe1f3202a8cbd04 EnCase Version:5.05f System Version:Windows XP Error Granularity:64 Read Errors:0 Missing Sector Errors:0 CRC Errors:0 Total Size:27,018,245,120 bytes (25.2GB) Total Sectors:52,770,010 Settings: fill none size cd Write Block: tableau 32 FW800</p>										
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AO-12 A clone is created from an image file.</td> <td>as expected</td> </tr> <tr> <td>AO-13 Clone created using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AO-19 Truncated clone is created.</td> <td>as expected</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-03 Execution environment is XE.	as expected	AO-12 A clone is created from an image file.	as expected	AO-13 Clone created using interface AI.	as expected	AO-19 Truncated clone is created.	as expected
Assertion & Expected Result	Actual Result										
AM-03 Execution environment is XE.	as expected										
AO-12 A clone is created from an image file.	as expected										
AO-13 Clone created using interface AI.	as expected										
AO-19 Truncated clone is created.	as expected										

Test Case DA-17 EnCase 5.05f		
	AO-20 User notified that clone is truncated.	as expected
	AO-23 Logged information is correct.	as expected
Analysis:	Expected results achieved	

5.2.50 DA-22-ATA28

Test Case DA-22-ATA28 EnCase 5.05f	
Case Summary:	DA-22 Create an unaligned clone from an image file, filling excess sectors.
Assertions:	<p>AM-03 The tool executes in execution environment XE.</p> <p>AO-12 If requested, a clone is created from an image file.</p> <p>AO-13 A clone is created using access interface DST-AI to write to the clone device.</p> <p>AO-14 If an unaligned clone is created, each sector written to the clone is accurately written to the same disk address on the clone that the sector occupied on the digital source.</p> <p>AO-18 If requested, a benign fill is written to excess sectors of a clone.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p>
Tester Name:	mrmw
Test Host:	frank
Test Date:	Thu May 24 13:43:22 2007
Drives:	src(43) dst (21) other (01-fu)
Source Setup:	<pre> src hash (SHA1): < 888E2E7F7AD237DC7A732281DD93F325065E5871 > src hash (MD5): < BC39C3F7EE7A50E77B9BA1E65A5AEEF7 > 78125000 total sectors (40000000000 bytes) Model (0BB-75JHC0) serial # (WD-WMAMC46588) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057143205 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 004208967 1023/001/01 1023/254/63 82 Linux swap 14 x 029431080 027712125 1023/000/01 1023/254/63 05 extended 15 S 000000063 027712062 1023/001/01 1023/254/63 07 NTFS 16 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 020980827 sectors 10742183424 bytes 3 000032067 sectors 16418304 bytes 5 002104452 sectors 1077479424 bytes 7 004192902 sectors 2146765824 bytes 9 008401932 sectors 4301789184 bytes 11 010490382 sectors 5371075584 bytes 13 004208967 sectors 2154991104 bytes 15 027712062 sectors 14188575744 bytes </pre>
Log Highlights:	<p>Destination setup</p> <p>195813072 sectors wiped with 21</p> <p>Comparison of original to clone Drive</p> <p>Sectors compared: 78125000</p> <p>Sectors match: 78125000</p> <p>Sectors differ: 0</p> <p>Bytes differ: 0</p> <p>Diffs range</p> <p>Source (78125000) has 117688072 fewer sectors than destination (195813072)</p> <p>Zero fill: 117688072</p> <p>Src Byte fill (43): 0</p> <p>Dst Byte fill (21): 0</p> <p>Other fill: 0</p> <p>Other no fill: 0</p> <p>Zero fill range: 78125000-195813071</p> <p>Src fill range:</p>

Test Case DA-22-ATA28 EnCase 5.05f															
	<p>Dst fill range: Other fill range: Other not filled range: 0 source read errors, 0 destination read errors</p> <p>Actual Date:05/25/07 02:14:22PM File Integrity:Completely Verified, 0 Errors Acquisition Hash:bc39c3f7ee7a50e77b9bale65a5aeef7 Verify Hash:bc39c3f7ee7a50e77b9bale65a5aeef7 EnCase Version:5.05f System Version:Windows 2003 Server Error Granularity:64 Read Errors:0 Missing Sector Errors:0 CRC Errors:0 Total Size:40,000,000,000 bytes (37.3GB) Total Sectors:78,125,000 Settings: fill 00 size cd</p>														
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AO-12 A clone is created from an image file.</td> <td>as expected</td> </tr> <tr> <td>AO-13 Clone created using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AO-14 An unaligned clone is created.</td> <td>as expected</td> </tr> <tr> <td>AO-18 Excess sectors are filled.</td> <td>as expected</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-03 Execution environment is XE.	as expected	AO-12 A clone is created from an image file.	as expected	AO-13 Clone created using interface AI.	as expected	AO-14 An unaligned clone is created.	as expected	AO-18 Excess sectors are filled.	as expected	AO-23 Logged information is correct.	as expected
Assertion & Expected Result	Actual Result														
AM-03 Execution environment is XE.	as expected														
AO-12 A clone is created from an image file.	as expected														
AO-13 Clone created using interface AI.	as expected														
AO-14 An unaligned clone is created.	as expected														
AO-18 Excess sectors are filled.	as expected														
AO-23 Logged information is correct.	as expected														
Analysis:	Expected results achieved														

5.2.51 DA-22-F16

Test Case DA-22-F16 EnCase 5.05f	
Case Summary:	DA-22 Create an unaligned clone from an image file, filling excess sectors.
Assertions:	<p>AM-03 The tool executes in execution environment XE.</p> <p>AO-12 If requested, a clone is created from an image file.</p> <p>AO-13 A clone is created using access interface DST-AI to write to the clone device.</p> <p>AO-14 If an unaligned clone is created, each sector written to the clone is accurately written to the same disk address on the clone that the sector occupied on the digital source.</p> <p>AO-18 If requested, a benign fill is written to excess sectors of a clone.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p>
Tester Name:	mrmw
Test Host:	Frank
Test Date:	Wed Oct 31 17:33:34 2007
Drives:	src(43) dst (09-IDE) other (01-FU)
Source Setup:	<pre> src hash (SHA1): < 888E2E7F7AD237DC7A732281DD93F325065E5871 > src hash (MD5): < BC39C3F7EE7A50E77B9BA1E65A5AEFF7 > 78125000 total sectors (4000000000 bytes) Model (0BB-75JHC0) serial # (WD-WMAMC46588) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057143205 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 004208967 1023/001/01 1023/254/63 82 Linux swap 14 x 029431080 027712125 1023/000/01 1023/254/63 05 extended 15 S 000000063 027712062 1023/001/01 1023/254/63 07 NTFS 16 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 020980827 sectors 10742183424 bytes 3 000032067 sectors 16418304 bytes 5 002104452 sectors 1077479424 bytes 7 004192902 sectors 2146765824 bytes 9 008401932 sectors 4301789184 bytes 11 010490382 sectors 5371075584 bytes 13 004208967 sectors 2154991104 bytes 15 027712062 sectors 14188575744 bytes </pre>
Log Highlights:	<pre> Destination setup 23444165 sectors wiped with 9 Comparison of original to clone Partition Sectors compared: 2104452 Sectors match: 2104452 Sectors differ: 0 Bytes differ: 0 Diffs range: Source (2104452) has 2506140 fewer sectors than destination (4610592) Zero fill: 0 Src Byte fill (43): 0 Dst Byte fill (09): 0 Other fill: 2506140 Other no fill: 0 Zero fill range: Src fill range: </pre>

Test Case DA-22-F16 EnCase 5.05f															
	<p> Dst fill range: Other fill range: 2104452-4610591 Other not filled range: run start Thu Nov 1 13:56:52 2007 run finish Thu Nov 1 14:00:26 2007 elapsed time 0:3:34 Normal exit Total Capacity:1,077,479,424 bytes (1GB) Total Clusters:2,104,452Unallocated:1,077,479,424 bytes (1GB) Actual Date:09/25/07 03:08:01PM File Integrity:Completely Verified, 0 Errors Acquisition Hash:37e81ffb31c3cb38aa48b2237500908e Verify Hash:37e81ffb31c3cb38aa48b2237500908e EnCase Version:5.05f System Version:Windows 2003 Server Error Granularity:64 Read Errors:0 Missing Sector Errors:0 CRC Errors:0 Total Size:1,077,479,424 bytes (1GB) Total Sectors:2,104,452 Settings: fill 5A </p>														
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AO-12 A clone is created from an image file.</td> <td>as expected</td> </tr> <tr> <td>AO-13 Clone created using interface AI.</td> <td>as expected</td> </tr> <tr> <td>AO-14 An unaligned clone is created.</td> <td>as expected</td> </tr> <tr> <td>AO-18 Excess sectors are filled.</td> <td>as expected</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-03 Execution environment is XE.	as expected	AO-12 A clone is created from an image file.	as expected	AO-13 Clone created using interface AI.	as expected	AO-14 An unaligned clone is created.	as expected	AO-18 Excess sectors are filled.	as expected	AO-23 Logged information is correct.	as expected
Assertion & Expected Result	Actual Result														
AM-03 Execution environment is XE.	as expected														
AO-12 A clone is created from an image file.	as expected														
AO-13 Clone created using interface AI.	as expected														
AO-14 An unaligned clone is created.	as expected														
AO-18 Excess sectors are filled.	as expected														
AO-23 Logged information is correct.	as expected														
Analysis:	Expected results achieved														

5.2.52 DA-24

Test Case DA-24 EnCase 5.05f									
Case Summary:	DA-24 Verify a valid image.								
Assertions:	<p>AM-03 The tool executes in execution environment XE.</p> <p>AO-06 If the tool performs an image file integrity check on an image file that has not been changed since the file was created, the tool shall notify the user that the image file has not been changed.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p>								
Tester Name:	mrmw								
Test Host:	Freddy								
Test Date:	Fri May 25 17:51:24 2007								
Drives:	src(01) dst (none) other (02-fu)								
Source Setup:	<pre>src hash (SHA1): < A48BB5665D6DC57C22DB68E2F723DA9AA8DF82B9 > src hash (MD5): < F458F673894753FA6A0EC8B8EC63848E > 78165360 total sectors (40020664320 bytes) Model (0BB-00JHC0) serial # (WD-WMAMC74171) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057175335 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 004208967 1023/001/01 1023/254/63 82 Linux swap 14 x 029431080 027744255 1023/000/01 1023/254/63 05 extended 15 S 000000063 027744192 1023/001/01 1023/254/63 07 NTFS 16 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 020980827 sectors 10742183424 bytes 3 000032067 sectors 16418304 bytes 5 002104452 sectors 1077479424 bytes 7 004192902 sectors 2146765824 bytes 9 008401932 sectors 4301789184 bytes 11 010490382 sectors 5371075584 bytes 13 004208967 sectors 2154991104 bytes 15 027744192 sectors 14205026304 bytes</pre>								
Log Highlights:	<pre>Actual Date:04/06/07 12:38:27PM File Integrity:Completely Verified, 0 Errors Acquisition Hash:f458f673894753fa6a0ec8b8ec63848e Verify Hash:f458f673894753fa6a0ec8b8ec63848e EnCase Version:5.05f System Version:Windows 2000 Error Granularity:64 Read Errors:0 Missing Sector Errors:0 CRC Errors:0 Total Size:40,020,664,320 bytes (37.3GB) Total Sectors:78,165,360</pre>								
Results:	<table border="1"> <thead> <tr> <th>Assertion & Expected Result</th> <th>Actual Result</th> </tr> </thead> <tbody> <tr> <td>AM-03 Execution environment is XE.</td> <td>as expected</td> </tr> <tr> <td>AO-06 Tool verifies image file unchanged.</td> <td>as expected</td> </tr> <tr> <td>AO-23 Logged information is correct.</td> <td>as expected</td> </tr> </tbody> </table>	Assertion & Expected Result	Actual Result	AM-03 Execution environment is XE.	as expected	AO-06 Tool verifies image file unchanged.	as expected	AO-23 Logged information is correct.	as expected
Assertion & Expected Result	Actual Result								
AM-03 Execution environment is XE.	as expected								
AO-06 Tool verifies image file unchanged.	as expected								
AO-23 Logged information is correct.	as expected								

Test Case DA-24 EnCase 5.05f	
Analysis:	Expected results achieved

5.2.53 DA-25

Test Case DA-25 EnCase 5.05f	
Case Summary:	DA-25 Detect a corrupted image.
Assertions:	<p>AM-03 The tool executes in execution environment XE.</p> <p>AO-07 If the tool performs an image file integrity check on an image file that has been changed since the file was created, the tool shall notify the user that the image file has been changed.</p> <p>AO-08 If the tool performs an image file integrity check on an image file that has been changed since the file was created, the tool shall notify the user of the affected locations.</p> <p>AO-23 If the tool logs any log significant information, the information is accurately recorded in the log file.</p>
Tester Name:	mrmw
Test Host:	Max
Test Date:	Tue Jul 3 13:29:19 2007
Drives:	src(01) dst (none) other (04-fu)
Source Setup:	<pre>src hash (SHA1): < A48BB5665D6DC57C22DB68E2F723DA9AA8DF82B9 > src hash (MD5): < F458F673894753FA6A0EC8B8EC63848E > 78165360 total sectors (40020664320 bytes) Model (0BB-00JHC0) serial # (WD-WMAMC74171) N Start LBA Length Start C/H/S End C/H/S boot Partition type 1 P 000000063 020980827 0000/001/01 1023/254/63 0C Fat32X 2 X 020980890 057175335 1023/000/01 1023/254/63 0F extended 3 S 000000063 000032067 1023/001/01 1023/254/63 01 Fat12 4 x 000032130 002104515 1023/000/01 1023/254/63 05 extended 5 S 000000063 002104452 1023/001/01 1023/254/63 06 Fat16 6 x 002136645 004192965 1023/000/01 1023/254/63 05 extended 7 S 000000063 004192902 1023/001/01 1023/254/63 16 other 8 x 006329610 008401995 1023/000/01 1023/254/63 05 extended 9 S 000000063 008401932 1023/001/01 1023/254/63 0B Fat32 10 x 014731605 010490445 1023/000/01 1023/254/63 05 extended 11 S 000000063 010490382 1023/001/01 1023/254/63 83 Linux 12 x 025222050 004209030 1023/000/01 1023/254/63 05 extended 13 S 000000063 004208967 1023/001/01 1023/254/63 82 Linux swap 14 x 029431080 027744255 1023/000/01 1023/254/63 05 extended 15 S 000000063 027744192 1023/001/01 1023/254/63 07 NTFS 16 S 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 17 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 18 P 000000000 000000000 0000/000/00 0000/000/00 00 empty entry 1 020980827 sectors 10742183424 bytes 3 000032067 sectors 16418304 bytes 5 002104452 sectors 1077479424 bytes 7 004192902 sectors 2146765824 bytes 9 008401932 sectors 4301789184 bytes 11 010490382 sectors 5371075584 bytes 13 004208967 sectors 2154991104 bytes 15 027744192 sectors 14205026304 bytes</pre>
Log Highlights:	<p>Image file corrupted for test run: Change byte 11370496 of file /tmp/da-10-uncompressed.E02 from 0x33 to 0x94 Starting Extent:0S0 Actual Date:06/30/07 01:36:26AM File Integrity:Completely Verified, 1 Errors Acquisition Hash:bc39c3f7ee7a50e77b9bale65a5aeef7 Verify Hash:7136e55fa3f5f761d7c938510c042c26 EnCase Version:5.05f System Version:Windows 2000 Error Granularity:64 Read Errors:0 Missing Sector Errors:0 CRC Errors:1 Total Size:40,000,000,000 bytes (37.3GB) Total Sectors:78,125,000</p>
Results:	

Test Case DA-25 EnCase 5.05f		
	Assertion & Expected Result	Actual Result
	AM-03 Execution environment is XE.	as expected
	AO-07 User notified if image file has changed.	as expected
	AO-08 User notified of changed locations.	as expected
	AO-23 Logged information is correct.	as expected
Analysis:	Expected results achieved	

About the National Institute of Justice

NIJ is the research, development, and evaluation agency of the U.S. Department of Justice. NIJ's mission is to advance scientific research, development, and evaluation to enhance the administration of justice and public safety. NIJ's principal authorities are derived from the Omnibus Crime Control and Safe Streets Act of 1968, as amended (see 42 U.S.C. §§ 3721–3723).

The NIJ Director is appointed by the President and confirmed by the Senate. The Director establishes the Institute's objectives, guided by the priorities of the Office of Justice Programs, the U.S. Department of Justice, and the needs of the field. The Institute actively solicits the views of criminal justice and other professionals and researchers to inform its search for the knowledge and tools to guide policy and practice.

Strategic Goals

NIJ has seven strategic goals grouped into three categories:

Creating relevant knowledge and tools

1. Partner with State and local practitioners and policymakers to identify social science research and technology needs.
2. Create scientific, relevant, and reliable knowledge—with a particular emphasis on terrorism, violent crime, drugs and crime, cost-effectiveness, and community-based efforts—to enhance the administration of justice and public safety.
3. Develop affordable and effective tools and technologies to enhance the administration of justice and public safety.

Dissemination

4. Disseminate relevant knowledge and information to practitioners and policymakers in an understandable, timely, and concise manner.
5. Act as an honest broker to identify the information, tools, and technologies that respond to the needs of stakeholders.

Agency management

6. Practice fairness and openness in the research and development process.
7. Ensure professionalism, excellence, accountability, cost-effectiveness, and integrity in the management and conduct of NIJ activities and programs.

Program Areas

In addressing these strategic challenges, the Institute is involved in the following program areas: crime control and prevention, including policing; drugs and crime; justice systems and offender behavior, including corrections; violence and victimization; communications and information technologies; critical incident response; investigative and forensic sciences, including DNA; less-than-lethal technologies; officer protection; education and training technologies; testing and standards; technology assistance to law enforcement and corrections agencies; field testing of promising programs; and international crime control.

In addition to sponsoring research and development and technology assistance, NIJ evaluates programs, policies, and technologies. NIJ communicates its research and evaluation findings through conferences and print and electronic media.

To find out more about the National Institute of Justice, please visit:

<http://www.ojp.usdoj.gov/nij>

or contact:

National Criminal Justice
Reference Service
P.O. Box 6000
Rockville, MD 20849–6000
800–851–3420
<http://www.ncjrs.gov>